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ABSTRACT

This document contains the second edition of the Alcohol or Drug Related Traffic Offenders' Program (ARTOP) curriculum guide developed by the Missouri Department of Mental Health to reduce alcohol-related traffic offenses by presenting factual information about the physical effects of alcohol on the body and on driving skills. The materials presented in the curriculum guide are to be used in ARTOP's 10 hours of education. An introduction is followed by a section on drinking and driving which examines the magnitude of the problem and discusses driving skills, the effects of alcohol on those skills, Driving While Intoxicated laws and penalties in Missouri, and alternatives to drinking and driving. A section on the physiology of alcohol describes how the body processes alcohol; blood alcohol content and physical signs of different levels; tolerance levels; the effects of alcohol on the body, including Fetal Alcohol Syndrome; and the use of substances in combination. The section on alcohol abuse and dependency explores motivations for use, economic costs, patterns of abuse and dependency, the disease concept of alcoholism, genetic factors, the effects of alcohol dependency on the family, the family response to alcohol dependency, and types of recovery resources. A list of six concluding tasks that need to be accomplished in the concluding phases of the program are given. Sample forms, program operations, and resource materials are appended. (NB)

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Missouri Department of Mental Health

Division of Alcohol and Drug Abuse

ARTOP

Curriculum Guide for Alcohol Related Traffic Offenders' Program

CG 022113

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June 1988

Dear ARTOP Administrators, Professionals, and Instructors:

The Missouri Legislature enacted a law in 1982 establishing educational programs for drinking and driving offenses. At that time the Governor mandated that the Department of Mental Health develop standards for the operation of Alcohol or Drug Related Traffic Offenders' Programs (ARTOPs). Based upon these standards, the original ARTOP Curriculum Guide was developed in 1984.

The laws concerning drinking and driving have been changed twice since the original guide; once in 1984 with the addition of Administrative Revocation and again in 1987 with the "Abuse and Lose" law.

The following is a second edition of the ARTOP Curriculum Guide. This Guide was developed in consultation with a task force of the largest ARTOP providers and reflects changes in statutes, program standards, and knowledge gained since the first edition in 1984.

The choice of binding was made to facilitate easy insertion of additional material or any future revisions that may be made.

The Division hopes that this Curriculum Guide will prove to be an easy document to use and welcomes your suggestions.

Sincerely,

Lois Olson

Lois Olson

LO:DTP:ldh

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MISSOURI CURRICULUM GUIDE
FOR
ALCOHOL-RELATED TRAFFIC OFFENDERS' PROGRAM

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FOREWORD

The combination of drinking and driving poses an enormous threat to Missourians. Alcohol impaired drivers account for more highway deaths and injuries than any other identifiable group. In Missouri last year 259 people died and another 8,697 were injured as a result of alcohol-related traffic accidents. These statistics represent an incredible amount of physical suffering, emotional pain and economic loss. Yet, no matter how graphically these statistics are presented, they tend to remain rather cold and sterile. That is a part of the problem. Another part is that drinking and driving seems to have wide social acceptance. It is an ARTOP's responsibility to present the information in such a way that it loses its sterility. Students need to personalize the information and undergo an attitude change so that they will perceive drinking and driving as not only illegal but also unacceptable.

The ARTOP objectives are to reduce the subsequent frequency of alcohol-related traffic offenses through presenting factual information about the physical effects of alcohol on the body and on driving skills and also through identifying and motivating students with a drinking problem to recognize the extent of the problem and make contact with alcohol rehabilitation services in the community.

Prospective students under the age of 21 with a DWI or BAC offense should be referred to an Alcohol and Drug Education Program (ADEP) rather than attend ARTOP. ADEP is specially designed for minors, provides information on a wider range of substances, conveys a stronger message to avoid alcohol and drug use, and encourages parent involvement. A minor with a DWI or BAC offense may attend ARTOP, if there is not a certified ADEP available locally.

ARTOP consists of ten (10) hours of education plus time for an individualized assessment, when indicated. (See pages II-4 through II-7 in Appendix II regarding possible assessment methods.) Recommendations must be presented to students, and each student must develop a personal plan of action. A copy of the "Notice of Assessment Recommendation" should be provided to the student and the referring court.

The ARTOP Curriculum Guide provides more than enough content for the ten hours of education—especially with the suggested use of films and guest speakers, the encouragement of class discussion and interaction, and the availability of further information in the appendices. In fact, the instructor may have difficulty fully covering all content areas. The curriculum guide includes certain content areas marked "Optional". These areas would be the first to cover briefly, or even eliminate.

The instructional section of this guide was developed so that the instructor would have an easy-to-follow core of information that would cover all required topics. Consequently, the Division expects that this part of the guide will be followed fairly closely. Those desiring to offer a substantially different program format or material must specifically request and receive written permission to do so from the Division.

Additional resource materials are included in the appendices to facilitate both the instructional and administrative aspects of the program. The Division realizes that instructional styles vary from person to person, with some prefering a more didactic approach and others having a discussion-oriented one. It is hoped that this guide will accommodate both styles .

Appropriate use of audio-visual materials, guest speakers, and other aids to instruction is expected and encouraged. They can present information in new and provocative ways, relieve boredom, or free the instructor to perform other tasks (counting money, grading papers, or talking one-on-one with students). However, use of these instructional aides as the basis for the program is unacceptable. No more than 20 percent of total class time may be used for audio-visual material and no more than 20 percent for guest speakers. Guest speakers must not be left in sole charge of classes. It is expected that use of guest speakers or films will be based on how well they match the educational goals of the program and not just on availability, length, or shock value.

Where guest speakers or volunteers are used, the ARTOP shall have written procedures regarding their recruitment, selection, training, supervision, dismissal, and compensation, where applicable.

Reasons for dismissal could include but are not limited to: ineffective speaking, inappropriate/offensive language, improper advances to classs members, coming to the class while substance impaired or questionable ethics regarding treatment facilities and self-help recovery groups. The program shall maintain a roster of guest speakers/volunteers which identifies their area of expertise, their function in the program, and any other pertinent information.

Pages III-31 through III-33 in Appendix III review recommended audio visual aids. Other films or videos may be used. The ARTOP shall document for each the title, length, source, summary of content, and relationship to ARTOP educational goals.

Attention to the details of program operations will add to the quality and effectiveness of the ARTOP. Collecting registration fees and checking attendance should be done with a minimum of time and distraction. This is no place for sloppy practices which can dissipate confidence in the program.

It is advisable to separate the course from the Court and law enforcement in as many ways as possible. Make clear that the course has nothing to do with who is arrested or with what sentence they receive. Disassociate the course from punishment and emphasize its educational goals.

Do not admit persons who are intoxicated or impaired to class. They can be disruptive, or they may "sleep it off" during the course and thus get credit for attendance, while in reality wasting everyone's time. Course requirements should make clear the need for showing up absolutely sober, and the rule must be enforced by ARTOP staff.

Do not assume that all students are alcoholics. However, research indicates that approximately one half of all first driving-while-impaired offenders have a serious problem with their use of alcohol. Make clear that the course is not intended to have all students stop drinking. Introduce as a course motto, "If a person drinks, that's his business; when he drinks and drives, that's everybody's business." But make the point that while most people seem to be able to control the amount of alcohol they consume, some cannot, and for them, not drinking at all may be the only solution to DWI offenses and other problems associated with alcohol or drug use.

One study of DWI offenders found them to have less serious problems associated with drinking than a clinical population receiving services at an outpatient alcohol treatment facility. Nevertheless, many of the DWI offenders reported substantial problems:

64% reported previous attempts to stop drinking.

44% reported loss of control over drinking.

40% reported blackouts.

28% reported personality changes associated with drinking.

26% reported a prior history of treatment.

24% reported a family history of alcoholism.

24% reported having shakes.

20% reported family/interpersonal problems associated with drinking.

10% reported work problems associated with drinking.

INTRODUCTION

ORIENTATION OF STUDENTS

Instructor Note: Initially introductions need to be made and students need to be oriented to class expectations.

- Introduce self and any other staff.

- Welcome students. Each student may be asked to introduce himself. Upon registration, students may be requested to have identification.

- Inform students of class expectations and structure and requirements for successful completion.

- Identify procedures for license reinstatement, where applicable (Record of Participation, proof of insurance, reinstatement fee).

Topics which should be covered include:

- Class length

- Breaks, meals

- Location of restrooms, drinking water, and snack machines, if available.

- Any rules regarding smoking

- Any rules regarding refreshments in class

- Punctuality in returning from breaks and starting new class sessions.

- Telephone number to call if they have questions or a reason for not attending class.

- Any expectations or rules regarding the attendance of family members

- Payment of fees

- Confidentiality of information

- Students' respect for each others confidentiality

- No drinking or substance use prior to or during class. Anyone violating this rule must be asked to leave. The referring agency shall be informed.

- Complete all assignments

- Cooperate with ARTOP staff and fellow students

- Statistical information must be collected for the Division of Alcohol and Drug Abuse and the Department of Highway Safety

- The instructor will inform students of their rights and the grievance procedure to follow should they have a complaint about the program. The instructor should distribute the listing of student responsibilities and rights and the grievance procedure, if this has not been done already. (See page 2 in Appendix I.) Student rights include the right to be treated with respect and dignity, to have records kept confidential, to be free of physical and verbal abuse, and to not be denied services because of race, sex, creed, marital status, national origin, handicap, or age.

INITIAL PAPERWORK

It is necessary to complete the paperwork that is required by state laws and regulations. *Instructor Note: Complete all initial paperwork including: (1)Student Registration (see page I-2); (2) Consent to Release Information (see page I-4); (3) Pre-test (see pages I-5); and (4) Screening Questionnaire, such as Mortimer-Filkins or MAST (see pages I-8).*

ARTOP GOALS

The primary purpose of the course is to help you avoid drinking and driving in the future by:

- Giving you factual information about alcohol and its effects.

- Having each of you explore and assess your drinking and driving behavior.

- Helping you develop alternatives to drinking and driving behavior.

DRINKING AND DRIVING

MAGNITUDE OF THE PROBLEM

- Approximately 43,000 people are killed in traffic accidents in the United States each year.
- Approximately one half of those deaths are alcohol-related. (For further information, see the table "Intoxicated Drivers Killed in Motor Vehicle Crashes" on page III-4 of Appendix III.)
- Ten years of war in Vietnam caused 46,000 U.S. battle deaths, but only two years of alcohol-related traffic accidents produce the same number of deaths. Over 500 of these deaths happen in Missouri.
- Every 19 minutes an alcohol-related automobile death happens in the U.S. Automobile accidents are the third greatest killer of Americans, behind heart disease and cancer.
- Automobiles are the number one killer of people under 25 years of age. Nearly 8,000 high-school aged young people are killed each year in accidents involving alcohol.
- Alcohol abuse and dependency cost the United States approximately 117 billion dollars annually. (For further information, see the table "Economic Costs of Alcohol Abuse and Dependency" on page III-1 of Appendix III.)
- Alcohol is the main cause or is a contributing factor in the death of over 100 thousand people each year in the U.S.
- Alcohol is a contributing factor in a large portion of crimes committed in the United States; 48% of all violent crimes, 64% of all public order offenses, and 40% of property offenses are alcohol-related. (For further information, see the table "Alcohol Use among Convicted Offenders" on page III-5 of Appendix III.)
- Accidents caused by intoxicated drivers tend to be more severe than accidents caused by sober drivers. Alcohol-related accidents are twice as likely to result in injury as are accidents in which alcohol is not involved. Alcohol-related accidents are ten times more likely to result in death than non-alcohol crashes.
- The drunkest 7% of drivers account for 33% of all traffic fatalities.

- In single-vehicle accidents in which the involved driver is almost certainly at fault for the accident, the percentage of dead drivers who are intoxicated is much higher than 50%.

- Besides killing themselves, drinking drivers are responsible for the deaths of many innocent people.

- Out of every 1,000 deaths caused by drinking drivers, 411 are sober drivers, sober pedestrians and passengers.

- Drunk driving injures 650,000 people per year.

- Drunk driving also causes billions of dollars per year in economic losses. Missouri's annual share of that loss is conservatively estimated to be at least $250 million, amounting to a sizable cost for every person in Missouri.

- Half of the alcohol consumed in the United States is accounted for by ten percent of the drinking population. About one-third of the United States population are light drinkers, one-third are moderate to heavy drinkers, and one third are abstainers.

- Drinking drivers kill and injure more people in Missouri than does any other single group.

- In 1987, 259 Missourians died in automobile accidents caused by drinking drivers.

- In 1987 another 8,697 people in Missouri were injured in accidents caused by drinking drivers.

- Nearly 50% of the people injured and killed in Missouri automobile accidents are under age 25.

- There are over 30,000 D.W.I. arrests in Missouri each year. The chances of having an accident are increased six times with a B.A.C. of .10% and are increased 25 times with a B.A.C. of .15%.

Students in this class are fortunate because you have a chance to examine your attitudes and behavior in relation to drinking and driving and make changes to avoid the possibility of harming yourself or other innocent people.

What is being done about the problem? Highway safety experts say that a primary goal is to reduce the number of alcohol-impaired drivers, which will in turn reduce the number of alcohol-related traffic problems. Closer adherence to the law, more modern means of detection, efforts of citizen's groups (such as Mother's Against Drunk Driving and Student's Against Driving Drunk) are all combining to make Missouri's roads safer.

Anyone with a BAC at the legal limit of .10% is too intoxicated to drive and cannot be a safe driver. Impairment (the inability to function normally) begins at a much lower BAC. Impairment actually begins at the .03 to .04% level. Impairment begins almost immediately upon consuming alcohol. Drinking alcohol does not have a neutral effect on one's ability to drive an automobile.

The drinking and driving laws in Missouri have become more stringent in the last five years, i.e. administrative suspension for driving with a BAC of .13% or greater, revocation of driver's license for repeat DWI offenders, and revocation of driver's license for minors. However, the laws in our state and nation are still much less stringent than the laws in many foreign countries. In Malaya, a DWI driver is jailed. If he is married, so is his spouse. In Australia, the names of DWI drivers are sent to the local newspaper and printed under a heading "He's drunk and in jail." In Turkey, the drunk driver is taken twenty miles from town and forced to walk home with a police escort. In Norway, the DWI offender spends three weeks in jail at hard labor with one year loss of license; for the second offense in five years, the driver's license is revoked for life. In Bulgaria, a second DWI conviction is punishable by death. In El Salvador, the first DWI conviction is the last; the driver is executed by firing squad. Many other countries use a much lower BAC as proof of intoxication. Bulgaria, Czecholslovakia and East Germany all use .03 percent. Australia, Greeece, Iceland, The Netherlands, Poland and Yugoslovia all use .05 percent BAC as proof of intoxication. Many other countries use .08 percent as proof of intoxication, including Great Britain, France, West Germany, Denmark, Canada, Belgium, Austria, Sweden, and Switzerland.

Optional - Utilize a guest speaker whose personal experience highlights and makes real the tragedy and suffering of drinking and driving. A representative from Mother's Against Drunk Driving might be appropriate. An offender whose drinking and driving behavior caused serious injury or death might also be suitable.

DRIVING SKILLS

We have talked about the primary purpose of the course which is to help you avoid another drinking and driving episode. We have also discussed the seriousness of the problem. Now we are going to discuss the skills required to drive and demonstrate how even small amounts of alcohol affects these skills.

Driving an automobile is the most complex psychomotor operation the average person does on a daily basis. The three basic elements involved in driving are:

- Sensing

  --Seeing

  --Hearing

  --Feeling

- Deciding

  --Once you sense the hazard, you must decide what to do

  --Good judgement or the right decision is essential

- Acting

  --Having decided what to do, you must be able to respond in time

  --You must be able to carry out the action skillfully and promptly, such as stop, slow down, speed up, change lanes, etc.

Sensing

Vision is the primary means of receiving information when driving. Important visual abilities related to the driving task include:

- Acuity (ability to see clearly)
- Depth and distance judgement

- Ability to distinguish colors
- Low illumination vision (driving just before sunrise or just after sunset)
- Ability to recover from sudden bright lights
- Peripheral vision
- Systematic search pattern which includes the instrument panel, road signs and traffic signals, traffic and other potential hazards, and position of automobile on the road.

Other sensory cues which assist the driver in monitoring the car's performance on the road include:

- Auditory: hearing
- Tactile: the feel of the steering wheel, brake pedal, and weight distribution of the driver on the car seat or against the door.
- Kinesthetic: the sensation experienced during acceleration, stopping, or making turns.

Deciding

- Judgement is dependent on past experiences and the ability of the brain to accurately interpret sensory information. Sensory interpretation includes:

  -- Ability to identify the most important cues and to identify them quickly.

  -- Ability to judge time-space relationships between vehicles and other objects, especially ability to judge closing rate and oncoming vehicle speed. Even when sober, accurate judgement become more difficult as vehicle speed increases.

  -- Ability to predict the actions of other vehicles based on cues. These cues include: directional signals; brake and back-up lights; position of vehicle; horn; speed changes; and eye-to-eye contact with other drivers.

- There are other cues that are even more subtle. You need to be able to predict or be alert to implied actions, based on:

  -- Age of driver and passengers

-- Number of people in car

-- Actions of occupants

Acting

- Reponse time is dependent on:

  -- Speed and quality of information processing and decision making by the driver.

  -- Reaction time, which varies remarkably little between sober drivers.

- Execution is the driver's actual skill in operating the vehicle according to intentions and depends on ability to:

  -- Operate steering

  -- Operate speed controls

  -- Operate braking controls

In summary, the ability to safely operate a vehicle depends on accurate perception, proper decisionmaking and capable action.

EFFECTS OF ALCOHOL ON DRIVING SKILLS

The question is "How does alcohol affect your ability to sense-decide-act when driving?"

- Even small amounts of alcohol affect and delay the sensing, deciding, and acting process.

- Any delay in your ability to sense-decide-act puts you at risk. One second is a relatively short time, but a delay of one second can be dramatic. *Instructor Note: You may want to diagram the following facts on a chalkboard or easel.*

  -- At 25 mph you are traveling approximatley 37 feet per second with a total reaction/braking distance on dry pavement of 50 to 60 feet. An extra second means that it would take you 90 to 100 feet to stop.

  -- At 50 mph you are traveling approximately 75 feet per second with a total reaction/braking time on dry pavement of 160 to 185 feet. An extra second means that it would take you approximately 250 feet to stop.

- Even small amounts of alcohol may cause impairment in vision. Alcohol quickly causes blurred vision and tunnel vision where the eye loses its peripheral vision. Also, alcohol at higher doses may cause double vision.

- Just one drink causes impairment to the brain, which controls judgement and reasoning ability. Alcohol is a sedative drug that depresses the central nervous system as a general anesthetic, slowing the activity of the brain and spinal cord.

- Alcohol reduces the ability to drive safely by affecting the brain.

- Alcohol is carried to the brain via the blood stream.

- The greater the concentration of alcohol in the blood, the more alcohol there is that is carried to the brain.

- When the concentration of alcohol in the blood reaches a sufficiently high level, the person's brain is affected to the point where his or her driving is unsafe. Impairment begins at .03%, well below the legal definition of intoxication.

- Alcohol affects the nerve cells of the brain and, consequently, the person's behavior.

Alcohol affects the brain in stages.

- Alcohol first sedates the cerebrum, the part that controls a person's judgement, thinking, and inhibitions. The driver's ability is impaired to accurately analyze the driving situation and make the most appropriate decisions.
- As the intoxication level increases, alcohol affects the cerebellum, impairing the driver's vision, speech, ability to react quickly, and ability to make necessary body movements such as moving foot to brake or turning the steering wheel. If the person continues to drink, the alcohol sedates the portion of the brain that regulates autonomic vital functions, such as heartbeat and breathing. Unconsciousness, coma, and death will occur if the person consumes a sufficient amount of alcohol.

When alcohol affects the cerebellum, vision can be impaired in the following ways:

- Reduces ability to distinguish colors
- Distorts eye focus
- Reduces visual acuity (accuracy)
- Causes double vision
- Reduces night visibility
- Reduces peripheral vision (causing tunnel vision)
- Reduces control of light entering the eye
- Slows eye recovery from headlight glare—When a car shines its high beams into your eyes, it takes up to seven seconds longer to restore your vision when drinking.

Horizontal gaze nystagmus is the most accurate of the field sobriety tests. The test involves having the driver follow a moving object such as a finger or pencil from side to side. Nystagmus means the involuntary jerking of the eyeballs. The drinking driver is unaware of this jerking and is unable to control it. As the BAC level increases, the jerking begins sooner and is more pronounced.

Almost 90% of the information we use in driving comes from vision. Since alcohol impairs vision and information processing, the alcohol-intoxicated brain poorly processes distorted information. The decisions the brain will make based on this processing will likewise be impaired. Because alcohol also impairs ability to carry out decisions, another source of error will result. The impairments, when compounded on each other, multiply the probability that the driver will have an accident. To be a safe driver, one needs to be free of the influence of all mind-altering substances. (For information about the effects of marijuana on driving skills, see page III-13 in Appendix III).

Driving Behavior of Drinking Drivers

Police look for the following 14 deviations from normal driving as possible signs of a drinking driver:

-- Driving unreasonably fast

-- Driving in spurts: slow, then fast, then slow, etc.

-- Frequent lane changing with excessive speed

-- Improper passing with insufficient clearance, also taking too long or swerving too much in overtaking and passing

-- Overshooting or disregarding traffic signals

-- Approaching signals unreasonably fast or slow and stopping or attempting to stop with uneven motion

-- Driving at night without lights. Delay in turning lights on when starting from a parked position.

-- Failure to dim lights to oncoming traffic

-- Driving in lower gears without apparent reason, or repeatedly clashing gears, squalling tires

-- Jerky starting or stopping

-- Driving unreasonably slow

-- Driving too close to shoulders or curbs, continually straddling the center line

-- Driving with windows down in cold weather

-- Driving or riding with head partly or completely out of the window

The common recognition factor is out-of-the-ordinary driving.

DWI LAWS IN MISSOURI

Instructor Note: The following information is taken from Revised Statutes of Missouri (1986) and the 1987 Supplement and may be technical in nature. This information is provided to you as an extensive resource. The instructor should summarize relevant information and answer student questions rather than recite the technical information in its entirety.

577.010. Driving while intoxicated.—1. A person commits the crime of "driving while intoxicated" if he operates a motor vehicle while in an intoxicated or drugged condition.

2. Driving while intoxicated is for the first offense, a class B misdemeanor. No person convicted of or pleading guilty to the offense of driving while intoxicated shall be granted a suspended imposition of sentence for such offense, unless such person shall be placed on probation for a minimum of two years.

A first offense of driving while intoxicated is a class B misdemeanor, which is punishable by imprisonment for a term of up to six months and a fine of up to $2,000. Punishment also includes assessment of eight points against the driver's license for the first offense.

577.012. Driving with excessive blood alcohol content.—1. A person commits the crime of "driving with excessive blood alcohol content" if he operates a motor vehicle in this state with ten-hundredths of one percent or more by weight of alcohol in his blood.

2. As used in this section, percent by weight of alcohol in the blood shall be based upon grams of alcohol per one hundred milliliters of blood and may be shown by chemical analysis of the person's blood, breath, saliva or urine.

3. For the first offense, driving with excessive blood alcohol content is a class C misdemeanor.

A first offense of driving with excessive BAC is a class C misdemeanor, which is punishable by imprisonment for a term of up to 30 days, and a fine of up to $1,000. Punishment also includes assessment of six points against the driver's license for the first offense.

577.020. Chemical tests for alcohol content of blood—consent implied—administered, when, how.—1. Any person who operates a motor vehicle upon the public highways of this state shall be deemed to have given consent to, subject to the provisions of sections 577.020 to 577.041, a chemical test or tests of his breath, blood, saliva or urine for the purpose of determining the alcohol or drug content of his blood if arrested for any offense arising out of acts which the arresting officer had reasonable grounds to believe were committed while the person was driving a motor vehicle while in an intoxicated or drugged condition. The test shall be administered at the direction of the arresting law enforcement officer whenever the person has been arrested for the offense.

Anyone who drives on public highways in Missouri automatically gives consent to a test to determine whether the person has been driving while intoxicated or drugged. There are four tests that may be administered in Missouri to determine

BAC - breath test, blood test, urine test, and saliva test. The breath test is the BAC test most commonly administered, using a breath analyzer.

577.023. Definitions of prior offender, persistent offender, intoxication-related traffic offense—guilty, prior or persistent offenders, penalties—imprisonment requirements—establishing defendant as prior or persistent offender, grounds— procedure—conviction of city or county ordinances, effect.—1. For purposes of this section, unless the context clearly indicates otherwise:

(1) An "intoxication-related traffic offense" is driving while intoxicated, driving with excessive blood alcohol content, or driving under the influence of alcohol or drugs in violation of state law;

(2) A "persistent offender" is one who has pleaded guilty to or has been found guilty of two or more intoxication-related traffic offenses committed at different times within ten years of a previous intoxication-related traffic offense conviction; and

(3) A "prior offender" is one who has pleaded guilty to or has been found guilty of an intoxication-related traffic offense within five years of a previous intoxication-related traffic offense conviction.

2. Any person who pleads guilty to or is found guilty of a violation of section 577.010 or 577.012 who is alleged and proved to be a prior offender shall be guilty of a class A misdemeanor. No court shall suspend the imposition of sentence as to such person nor sentence such person to pay a fine in lieu of a term of imprisonment, section 557.011, RSMo, to the contrary notwithstanding, nor shall such person be eligible for parole or probation until he has served a minimum of forty-eight consecutive hours imprisonment, unless as a condition of such parole or probation such person performs at least ten days involving at least forty hours of community service under the supervision of a court in those jurisdictions which have a recognized program for community service.

A second drinking and driving offense in a five year period is a class A misdemeanor, which is punishable by imprisonment for a term of up to six months and a fine of up to $5,000. Offenders are not eligible for probation unless they serve 48 consecutive hours of imprisonment or perform 40 hours of community service as a condition of probation. Weekend Intervention Programs meet the requirement of 48 consecutive hours of imprisonment.

3. Any person who pleads guilty to or is found guilty of a violation of section 577.010 or 577.012 who is alleged and proved to be a persistent offender shall be guilty of a class D felony. No court shall suspend the impostion of sentence as to such person nor sentence such person to pay a fine in lieu of a term or imprisonment, section 557.011, RSMo, to the contrary notwithstanding.

Three or more drinking and driving offenses in a ten year period is a class D felony, which is punishable by imprisonment for a term of up to ten years and a fine of up to $10,000.

577.041. Refusal to submit to chemical test—revocation of license, hearing—evidence, admissibility.—1. If a person under arrest refuses upon the request of the arresting officer to submit to any test allowed under section 577.020, then none shall be given and evidence of the refusal shall be admissible in a proceeding under section 577.010 or 577.012. The request of the arresting officer shall include the reasons of the officer for requesting the person to submit to a test and also shall inform the person that evidence of his refusal to take the test may be used against him and that his license my be revoked upon his refusal to take the test. In this event, the arresting officer, if he so believes, shall make a sworn report to the director of revenue that he has reasonable grounds to believe that the arrested person was driving a motor vehicle while in an intoxicated condition and that, on his request, refused to submit to the test. Upon receipt of the officer's report, the director shall revoke the license of the person refusing to take the test for a period of one year; or if the person arrested be a nonresident, his operating permit or privilege shall be revoked for one year; or if the person is a resident without a license or permit to operate a motor vehicle in this state, an order shall be issued denying the person the issuance of a license or permit for a period of one year.

2. If a person's license has been revoked because of his refusal to submit to a chemical test, he may request a hearing before a court of record in the county in which he resides or in the county in which the arrest occurred. Upon his request the clerk of the court shall notify the prosecuting attorney of the county and the prosecutor shall appear at the hearing on behalf of the arresting officer. At the hearing the judge shall determine only:

(1) Whether or not the person was arrested;

(2) Whether or not the arresting officer had reasonable grounds to believe that the person was driving a motor vehicle while in an intoxicated condition; and

(3) Whether or not the person refused to submit to the test.

3. If the judge determines any issue not to be in the affirmative, he shall order the director to reinstate the license or permit to drive.

4. Requests for review as herein provided shall go to the head of the docket of the court wherein filed.

A person who is suspected of driving while intoxicated or drugged is expected to submit to any chemical test as requested by an arresting officer. If the person refuses, the officer makes a report to the Department of Revenue, which in turn revokes the person's license for one year.

577.049. Traffic offender program, court may order participation in, when—1. Upon a plea of guilty or a finding of guilty for a first offense of violating the provisions of section 577.010 or 577.012 or violations of county or municipal ordinances involving alcohol or drug related traffic offenses, the court may, as a condition for suspending any permissible portion of any sentence or in addition to imposition of any penalties provided by law, section 557.011, RSMo, to the contrary notwithstanding, order the convicted person to participate in and successfully complete an alcohol or drug related traffic offender education or rehabilitation program which meets or exceeds minimum standards established by the department of public safety and the department of mental health. Such a program may be used as a condition for suspending any permissible portion of any sentence only one time.

2. The cost of the program shall be paid by the person attending the program.

3. The clerk of the court which orders any person to participate in an alcohol education or rehabilitative program shall send a record of the participation and completion of the program to the Missouri state highway patrol for inclusion in the Missouri uniform law enforcement systems records.

ARTOP may be ordered by a judge for a first offense, in addition to other penalties or as a condition for a suspended sentence.

302.520. Arresting officer to serve notice of suspension or revocation—when to possess license, issue temporary permit, give written notice of driver's rights and responsibilities—application for hearing.—1. Whenever the chemical test results are available to the law enforcement officer while the arrested person is still in custody, and where the results show an alcohol concentration of thirteen-hundredths of one percent or more by weight of alcohol in his blood, the officer, acting on behalf of the department, shall serve the notice of suspension or revocation personally on the arrested person.

2. When the law enforcement officer serves the notice of suspension or revocation, the officer shall take possession of any driver's license issued by this state which is held by the person. When the officer takes possession of a valid driver's license issued by this state, the officer, acting on behalf of the department, shall issue a temporary permit which is valid for fifteen days after its date of issuance and shall also give the person arrested a notice which shall inform him of his rights and responsibilities under sections 302.500 to 302.540. The notice shall be in such form so that the arrrested person may sign the original as evidence of his receipt thereof. The notice shall also contain a detachable form permitting the arrested person to request a hearing. Signing the hearing request form and mailing such request to the department shall constitute a formal application for a hearing.

3. A copy of the completed notice of suspension or revocation form, a copy of any completed temporary permit form, a copy of the notice of rights and responsibilities given to the arrested person, including any request for hearing, and any driver's license taken into possession under this section shall be forwarded to the department by the officer along with the report required in section 302.510.

4. The department shall provide forms for notice of suspension or revocation, for notice of rights and responsiblities, for request of a hearing and for temporary permits to law enforcement agencies.

An arresting officer will confiscate the license of a person with a BAC of .13% or higher and will issue a 15-day temporary driving permit. An offender can appeal administrative suspension.

302.525. Suspension or revocation, when effective, duration—restricted driving privilege—effect of suspension or revocation by court on charges arising out of same occurrence.—1. The license suspension or revocation shall become effective fifteen days after the subject person has received the notice of suspension or revocation as provided in section 302.520, or is deemed to have received the notice of suspension or revocation by mail as provided in section 302.515. If a request for a hearing is received by or postmarked to the department within that fifteen-day period, the effective date of the suspension or revocation shall be stayed until a final order is issued following the hearing; provided, that any delay in the hearing which is caused or requested by the subject person or counsel representing that person without good cause shown shall not result in a stay of the suspension or revocation during the period of delay.

2. The period of license suspension or revocation under this section shall be as follows:

(1) If the person's driving record shows no prior alcohol related enforcement contacts during the immediately preceeding five years, the period of suspension shall be thirty days after the effective date of suspension, followed by a sixty-day period of restricted driving privilege issued by the director of revenue for the limited purpose of driving in connection with the person's business, occupation, or employment, and to and from an alcohol education or treatment program. The restricted driving privilege shall not be issued until he or she has filed proof of financial responsibility with the

bureau of safety responsibility, department of revenue, in accordance with chapter 303, RSMo, and is otherwise eligible;

3. For purposes of this section "alcohol related enforcement contacts" shall include any suspension or revocation under sections 302.500 to 302.540, any suspension or revocation entered in this or any other state for a refusal to submit to chemical testing under an implied consent law, and any conviction in this or any other state for a violation which involves driving a vehicle while having an unlawful alcohol concentration.

For a first offense, the supension is 30 days followed by a 60 day period of restricted driving to and from work or ARTOP.

577.505. Revocation of driving privileges, persons over twenty-one years of age—possession or use of drug in motor vehicle—surrender of licenses—court shall forward order to department of revenue.—A court of competent jurisdiction shall enter an order revoking the driving privileges of any person determined to have violated any state, county, or municipal law involving the possession or use of a controlled substance, as defined in chapter 195, RSMo, while operating a motor vehicle and who, at the time said offense was committed, was twenty-one years of age or older when the person pleads guilty, or is convicted or found guilty of such offense by the court. The court shall require the surrender to it of all operator's and chauffeur's licenses then held by such person. The court shall forward to the director of revenue the order of revocation of driving privileges and any licenses surrendered.

Those possessing or using a controlled substance while driving will have their drivers license revoked for one year. This includes a state, county, or municipal charge.

Hardship driving privileges can be awarded by the circuit court to allow an individual to drive in order to earn a livelihood. However, the following groups are not eligible for a hardship driving permit: (1) Those convicted of two offenses within a five year period; (2) Those convicted of three offenses in a ten year period; (3) Those who have operated a motor vehicle under the influence of a controlled substance or narcotic drugs; (4) Those who have left the scene of an accident; and (5) Those convicted of a felony in which a motor vehicle was used, such as involuntary manslaughter or second degree assault. (Section 302.309 RSMo.)

If a person is convicted of a state DWI offense twice within a five year period, or if he is convicted of involuntary manslaughter while operating a motor vehicle in an intoxicated condition, then he may not be issued a license for a period of five years after the second conviction. (Sec. 302.060)

Those who are convicted of state DWI charges three or more times may not be issued a driver's license until ten years after the last conviction. After ten years, they may petition the circuit court for an order of reinstatement. If the court finds that they are no longer a threat to public safety, the judge may order the Department of Revenue to issue a new license. This can only be done one time. (Sec. 302.060)

Sometimes a person who has had his driver's license suspended or revoked is tempted to continue driving. Driving while revoked is a Class A misdemeanor with a penalty of 48 hours of consecutive imprisonment or ten days (40 hours) of community service.

Other Crimes Associated with Driving While Intoxicated

565.024. Involuntary manslaughter, penalty.—A person commits the crime of involuntary manslaughter if he. . .while in an intoxicated condition operates a motor vehicle in this state and, when so operating, acts with criminal negligence to cause the death of any person.

Involuntary manslaughter is a class C felony.

A class C felony is punishable by imprisonment for ten years. Anyone convicted of involuntary manslaughter while operating a motor vehicle in an intoxicated condition will lose their driver's license for a period of five years.

565.060. Assault, second degree, penalty.—1. A person commits the crime of assault in the second degree if he. . .while in an intoxicated condition or under the influence of controlled substances or drugs, operates a motor vehicle in this state and, when so operating, acts with criminal negligence to cause physical injury to any other person than himself.

Assault in the second degree is a class C felony.

302.302. Point system--assessment for violation--assessment of points stayed, when, procedure.—1. The director of revenue shall put into effect a point system for the suspension and revocation of chauffeurs' and operators' licenses. Points shall be assessed only after a conviction or forfeiture of collateral. The initial point value is as follows:

For the first conviction of driving while in an intoxicated condition or under the influence of controlled substances or drugs..8 points

For the second or subsequent conviction of driving while in an intoxicated condition or under the influence of controlled substances or drugs or for the second or any subsequent conviction for driving with blood alcohol content of ten-hundredths of one percent or more by weight or for the first conviction of driving while in an intoxicated condition or under the influence of controlled substances or drugs after a previous conviction for driving with blood alcohol content of ten-hundredths of one percent or more by weight or for the first conviction of driving with blood alcohol content of ten-hundredths of one percent or more by weight after a previous conviction for driving while in an intoxicated condition or under the influence of controlled substances or drugs...12 points

For the first conviction for driving with blood alcohol content ten-hundredths of one percent or more by weight

In violation of state law .... 6 points

In violation of a county or municipal ordinance................................ 6 points

An additional two points shall be assessed when personal injury or property damage results from any violation listed in subsection 1 and if found to be warranted and certified by the reporting court.

The director shall revoke the driver's license and driving privileges of any person when his driving record shows he as accumulated twelve points in twelve months or eighteen points in twenty-four months or twenty-four points in thirty-six months.

Drinking and driving offenses also result in the assessment of points. Revocation of driving privileges can result from the accumulation of points. Although not directly related to DWI laws, the Director of Revenue is prohibited from issuing a chauffer's license or operator's license to anyone who is "an habitual drunkard or is addicted to the use of narcotic drugs".

Instructor Note: Each instructor should learn the municipal offenses and penalties in his area and share this information with students also.

COSTS OF A DWI

Statistics have a way of being abstract and meaningless to most of us. One thing that makes an impression on all of us is money coming out of our own bank account. We will add up what you spent on this DWI.

Instructor Note: Ask students for the actual "out of pocket" expense of this DWI. Write these figures on a chalkboard or easel. Attempt to involve as many students as possible. For each of the following items, identify the high and low costs incurred by class members.

-- Money for fine

-- Money for court costs and victims compensation fund

-- Other traffic offenses involved and any fines

-- Lawyer

-- Loss of time from work (appointments with lawyer, court hearing, other meetings)

--Doctor and/or hospital

-- Towing charges

-- Property damage not covered by insurance

-- Bond

-- ARTOP

In order to get your driver's license reinstated, you must pay a $20 reinstatement fee and file Proof of Financial Responsibility (insurance). Your insurance rates will dramatically increase for at least three years and possibly as long as five years.

Automobile insurance rates vary considerably, depending on the amount of coverage, make and model of the car insured, age and sex of the driver, and many other factors. It is possible, however, to make some very rough approximations about the costs to insure a particular car and driver. These are given only as examples and should not be used as a base to determine your insurance rates.

In May 1988, a 19 year old employed (non-student) male, without any prior accidents or driving citations, should be able to purchase basic full coverage insurance for a seven year old Camaro for between $557 and $900 every six months. If he were to receive a DWI conviction, his insurance rates would escalate to between $1,400 and $2,000 every six months. If he were involved in an accident at the time he received his DWI citation, the rates would go even higher. Many insurance companies are reluctant to insure this type driver at all and may refuse to accept him at any rate. If that happens, the driver may find that automobile insurance is available only through a high risk pool.

Next, if we look at a 35 year old employed male (automobile insurance rates for females are generally lower than for comparable males) with a two year old medium priced sedan, he should be able to purchase basic full coverage insurance for between $165 and $200 every six months. If he were to receive a DWI citation, the rates would increase to between $532 and $792 every six months. If there were an accident in conjunction with the DWI citation, the rates would be much higher.

The automobile insurance rates for anyone convicted of a DWI will increase dramatically, doubling, tripling, quadrupling, or more the rate they had been paying prior to the conviction. Many drivers find this difference too steep. They are unable to afford insurance and maintain other obligations. They may purchase liability insurance only. They may acquire a less expensive car. Or they may be forced into parking their cars or selling them and developing alternate means of transportation (taxi, friends, bicycles, buses, walking). Professional drivers can lose their jobs. Those who drive without insurance run the risk of additional penalties. The penalty for driving without insurance is a fine of not more than $500 or imprisonment for not more than 90 days or both.

A further DWI will be even more expensive.

-- A second DWI offense in a five year period of time under state law can result in loss of driver's license for five years, imprisonment for up to six months, and a fine up to $5,000.

-- A third DWI offense in a ten year period under state law can result in loss of driver's license for at least ten years, imprisonment for up to ten years, and a fine of up to $10,000.

ALTERNATIVES TO DRINKING AND DRIVING

Alcohol acts very quickly and begins to impair driving skills as well as judgement almost at the onset of drinking. A common misconception is that a drinker is not significantly affected in his driving skills until a BAC of .10% is reached. In reality, anyone, even the most experienced drinker, becomes impaired long before they reach .10%. Everyone will begin to experience impairment of reaction time at .03% BAC.

Instructor Note: Have class discuss alternatives to DWI. Be sure to note the following if they are not mentioned by the class.

Alternatives include:

1. Drinking only at home, when you are certain you will not drive. However, emergencies do arise which make this strategy difficult to carry out.
2. Riding with a "designated driver", that is, someone in the group who volunteers to remain abstinent, not just less drunk.
3. Staying over, if at a friend's house.
4. Calling someone (friend or family member) for a ride.
5. Allowing someone who is not drinking to drive.
6. Using public transportation, such as bus, taxicab, etc.
7. Walking, if the distance and temperature are reasonable.

Important ideas to remember are: alcohol is a sedative drug which clouds judgement and skills; decisions about how much one can drink and still remain a safe driver should not be "adjusted" while drinking; it is as inappropriate for you to ride with a drinking driver as it is for you to drive while impaired.

PHYSIOLOGY OF ALCOHOL

HOW THE BODY PROCESSES ALCOHOL

Instructor Note: Ask the students to brainstorm what the possible effects are on a person who uses drugs. Clarify that you are discussing drugs in general and not the effects of a specific drug. As students mention drug effects, list them on the blackboard or a flipchart. Ask the students to brainstorm the possible effects of alcohol on a person who drinks. Record these and then compare them with the list of drug effects. Point out that alcohol is a drug, and ask students if they can see additional drug effects listed which also apply to alcohol.

What is alcohol?

- Alcohol is a drug and not just a beverage. Like any drug that affects the mind, it has the potential to be abused.

  Instructor Note: See page III-10 in Appendix III for a list of some of the commonly circulated myths about alcohol, alcohol use, and the process of becoming sober. It may be interest at this point in the program, but it is an optional item that can be included in the curriculum

- Chemically, ethyl alcohol is a colorless liquid with a sharp burning taste. Its chemical formula is C_2H_5OH. When two molecules of alcohol (C_2H_5OH-C_2H_5OH) are combined and one molecule of water (H_2O) is removed, the result is $(C_2H_5)_2O$ which is ether. Not surprisingly, alcohol has historically been used as a pain killer and sedative before modern and effective medical advances have made obsolete any such use of alcohol.

- Alcohol is a sedative drug that acts as a central nervous system depressant, slowing the activity of the brain and spinal cord.

- What does alcohol actually do to people?

  -- It rapidly enters the bloodstream and circulates to all parts of the body within a few minutes. Alcohol does not have to be digested or broken down to enter the body. It is directly absorbed into the bloodstream, with most of it absorbed from the small intestine.

  -- The main effect is in the brain. Alcohol "knocks out" control centers one by one, resulting in intoxication.

  -- The body eliminates alcohol at the rate of nearly one drink per hour. Ninety percent is broken down by the liver and 10 percent eliminated by the lungs (breath) and kidneys (urination). The average 150 pound person could consume one drink per hour with only a small accummulation of alcohol in the blood. Drinking faster than this will result in increased intoxication.

- The body's processing of alcohol refers to how the body handles the alcohol after it is consumed. Processing includes absorption, distribution, accumulation, oxidation, and elimination.

Absorption

Alcohol does not enter the bloodstream through the usual digestive processes. Very small amounts of alcohol are absorbed directly into the blood through the lining of the mouth and esophagus, and still more is absorbed through the stomach. The largest amount of alcohol - 70 to 80 percent - is absorbed into the blood through the small intestine.

Alcohol begins to have its effects after absorption has occurred and the alcohol is circulating throughout the body, including the brain. Several factors influence the rate at which alcohol is absorbed and, thus, how rapidly the person becomes intoxicated. These factors include:

-- The strength of the beverage, measured by its percentage of alcohol. Since beer contains more water than a beverage with a higher concentration of alcohol, it is absorbed more slowly. A martini is absorbed more quickly.

-- Carbonation in the beverage. The tiny bubles in soda and champagne open the pyloric valve leading from the stomach into the small intestine. This causes the alcohol to more quickly reach the small intestine, where most alcohol is absorbed.

-- The presence of food in the stomach. Food, especially food high in proteins, soaks up some of the alcohol, thus taking the alcohol longer to pass through the stomach and to reach the small intestine.

-- The condition of the stomach, pyloric valve, and lining of the intestines.

Distribution

Alcohol is dissolved in the blood and is carried to all parts of the body by way of the bloodstream. The blood tends to distribute its contents equally, i.e. the blood found in one part of the body is much the same as the blood found in any other part of the body. Consequently, the concentration of alcohol will be fairly consistent throughout the body.

Accumulation

Intoxication develops from a build-up of alcohol in the body. A build-up occurs when the drinker takes in alcohol at a faster rate than the body can chemically break it down, or oxidize it. Blood alcohol concentration is a measurement of a person's blood alcohol content at one point in time. It is increased by additional alcohol intake, but decreased by the body's oxidation of alcohol. Rate of accumulation, then, is determined by the ratio of alcohol intake to alcohol oxidation.

Elimination

Most of the alcohol is eliminated from the body after being chemically changed by the liver. This oxidation process changes the alcohol to a form which can be eliminated from the body. The alcohol is first oxidized to acetaldehyde, which is then broken down into acetate and eventually into carbon dioxide and water. A normal liver can oxidize the alcohol in approximately one drink per hour. Therefore, if a person drinks more than one drink per hour, the alcohol will accumulate and the blood alcohol concentration will increase.

Five to ten percent of the circulating alcohol is passed from the bloodstream in the breath, perspiration, and urine without being oxidized by the liver. The majority of the alcohol is first oxidized by the liver and then the remaining products - carbon dioxide and water - are removed by the kidneys and excreted in the urine.

BLOOD ALCOHOL CONTENT (BAC)

It is important to remember that alcohol is alcohol and is chemically the same whether it is in beer, wine, or distilled spirits, such as whiskey, vodka, gin, or rum. Most servings of alcoholic beverages contain approximately the same amount of alcohol, e.g. a 12 oz. can of 5% beer will contain approximately .6 oz. of pure alcohol, a 5 oz. glass of 12% wine will also have .6 oz of alcohol, and a mixed drink with 1 1/2 oz. of 86 proof (43%) whiskey will contain .6 oz of alcohol.

A person's blood alcohol content (BAC) is determined by three things: body weight, amount of alcohol consumed, and the time taken to consume it. BAC is expressed as a ratio of weight to volume. BAC is the number of grams of alcohol per 100 milliliters of blood. Scientists and the courts generally have agreed that a ratio of 2,100-to-1 can be used as the approximate ratio between blood alcohol concentration and deep-lung breath alcohol concentration. That is, the concentration of alcohol in the blood is approximately 2,100 times the concentration of alcohol in deep-lung breath. This is a conservative figure—with most individuals, the blood alcohol concentration is more than 2,100 times greater than the breath alcohol concentration. By determining the alcohol concentration in a sample of a person's deep-lung breath, a breath analyzer can compute the concentration of alcohol in the person's bloodstream.

The volume of blood in the body of the drinker is very important because it determines how much the alcohol will be diluted when it enters the bloodstream. The larger the volume of blood, the lower will be a person's BAC when consuming a drink. One's volume of blood can be estimated based on body size. Generally, a heavier person has more blood than a smaller person.

A large person can drink the same amount during the same time as a smaller person and will have a lower BAC. Sometimes people in a group believe they should drink drink-for-drink with each other. This can be disastrous for some, especially the smaller or less muscular.

Muscle tissue has more blood than does fatty tissue so an obese person, although he might weigh more than a smaller more muscular person, might have less blood to dilute the alcohol. Therefore, the heavier but more obese person could have a higher BAC. Also, women tend to have higher fat to muscle ratios than men. Consequently, they will tend to have higher BAC's than would a male of the same weight who drank the same amount of alcohol in the same amount of time. However, the fat-to-muscle ratio is not as important as the factors of body weight, amount of alcohol, and time.

Carbonated beverages tend to enter the small intestines faster than non-carbonated drinks and are absorbed more quickly there. Because most alcohol enters the body through the small intestines, drinks which are bubbly will enter the blood stream faster than those which are not. However, this should have a fairly negligble effect over the course of an evening or several hours of drinking.

Rapid drinking results in a higher blood alcohol concentration than does slower drinking. Someone who drinks steadily throughout the day may consume much more total volume of alcohol than someone who drinks a smaller amount in a short period of time, but still may have a lower BAC. In fact, one of the most dangerous practices in drinking is the opening "double shot", "boiler-maker", or other practices which flood the system with strong concentrations of alcohol.

Fatigue can increase the effects of alcohol. Tired drinkers usually are affected more rapidly. Mood can infludence the effects of alcohol. A person who is angry or depressed may show greater effects than when emotionally more stable.

Young people and those with little previous drinking experience are often affected at very low BACs. Studies of different age groups who were involved in fatal motor vehicle accidents show that accidents tend to occur at a much lower BAC among 16 to 24 year olds than among persons in older age groups. Younger drivers are at a greater risk of becoming involved in a fatal accident because of their relative inexperience at both drinking and driving. More young people (those under 25) die in automobile accidents than from any other cause. At least half of these deaths are alcohol-related.

Instructor Note: Ask the class to brainstorm the commonly attempted techniques for sobering up faster. Ask if any of these techniques are successful. Clarify the fallacies of each effort. Be sure the discussion includes: coffee, fresh air, cold showers, and exercise. Sobering up results from the body reducing its blood alcohol concentration. This is mainly accomplished by the liver oxidizing the alcohol. Since the liver oxidizes alcohol at a constant rate, only time can sober up the intoxicated person. Therefore, none of the supposed "remedies" will have an effect.

The liver eliminates (oxidizes) alcohol at a fairly constant rate for almost all people. This rate is approximately one drink per hour (one beer, one mixed drink, one glass of wine). Thus, it is possible to estimate how much alcohol can be consumed in a particular period of time by someone whose body weight is known and then to predict the degree of impairment. Some variations occur as a result of general health, damage to the liver, age of the drinker, or other considerations.

(Optional) Instructor Note: Distribute BAC chart which can be found on page III-8 of Appendix III and have students compute one or more of the following:

- *Have each student recall the amount of alcohol consumed and time period when they received the drinking and driving citation. Ask them to calculate their BAC.*
- *Have each student determine how many drinks he can consume in three hours without exceeding the impairment level of .03%.*
- *What is the BAC of a 160 pound person who has 9 drinks in 3 hours? BAC of .181 less 3 X .015 (.045 burned up) still leaves a BAC of .136.*
- *How much longer would this person have to wait before he would be under the BAC legal limit of .10%? 3 hours, he would still have .091.*
- *Ask questions to determine if students understand how to use the chart. Reiterate the three main factors of BAC—body weight, amount, and time.*

PHYSICAL SIGNS AND APPROXIMATE BAC

- BAC under .05%
  - -- Flushed cheeks
  - -- Warm feeling
  - -- Talkative
  - -- Reduced inhibitions
  - -- Lightheadedness
  - -- Exhilaration
  - -- At .03%, all people show impairment of reaction time.
  - -- At .04%, many people show impairment of vision.
  - --At .05%, happy, talkative, relaxed, sociable, fewer inhibitions and worries. Loss of judgement and efficiency.
- BAC .05% - .10%
  - -- Dulled perceptions
  - -- Judgement impaired
  - -- Possibly argumentative
  - -- Tired
  - -- At .05%, judgement and inhibition are noticeably affected
  - -- At .05%, field of vision is reduced 30%
  - -- At .08%, visual acuity, especially night vision and ability to focus, is impaired
  - --At .10%, emotional or erratic behavior, impaired thinking, slower reaction, poor judgement, loss of control over actions.

- BAC .10% - .15%

  -- Poor coordination

  -- Poor space and time perception

  -- Poor decision making

  -- Impairment of depth perception and peripheral vision

  -- Antisocial behavior (extreme agressiveness while driving, following too closely, running red lights, only slowing for stop signs, or any other behavior which tends to disregard the rights and safety of others)

  --Sleepiness

  -- Depression

  -- At .10%, all people show definite impairment of reaction time, judgement, vision, and muscle control (balance, coordination, and stability). Most people show impairment of these capabilities well below .10%.

  -- At .12%, the distance a driver can see is reduced 20%

- BAC .15% - .25%

  -- At .20%, loss of emotional control, confused, stagggering, disoriented, moody, slurred spech, double vision, and exaggerated feelings, including anger

  --Unconsciousness may occur

- BAC .25% - .40%

  -- At .30%, stupor, unable to stand or walk, approaching paralysis, barely conscious, apathetic and inert

  -- At .35%, impairment of awareness of time and place is evident.

  -- Convulsions and coma may occur.

- BAC over .40%

--Coma, completely unconscious, few or no reflexes

-- Death may occur. Half of the people who accummulate a BAC of .40% will die.

(See page III-9 in Appendix III for a handout that summarizes BAC effects.

Alcohol impairs reaction time - the length of time it takes drivers to react to a situation:

-- BAC .05% - reaction time increases 20%

-- BAC .10%- reaction time increases 33%

-- BAC .12% - reaction time increases 70%

Studies have determined the extent to which BAC levels increase the probability of having an accident:

-- BAC .05% - probability of an accident doubles

-- BAC .10% - probability of an accident is 6 times greater

-- BAC .15% - probability of an accident is 25 times greater.

(For further information refer to the graph "Probability of a Crash" on page III-7 of Appendix III.)

Anyone, even the best and the most experienced drinker, is far too intoxicated to be a safe driver at .10% BAC. It is important to remember that impairment begins at a much lower BAC than the legal limit of .10%. Impairment begins almost immediately with the onset of drinking, not at the point of legal intoxication. Measureable impairment for all begins at .03%, and for some even lower.

(Optional) Alcohol has a profound effect on driving abilities. However, all drinking drivers are not alike in their driving skills and experiences; nor are they alike in their drinking habits and experiences.

- Drinking drivers who are skillful but whose drinking is compulsive and uncontrolled. Consequently, whenever they drink, the alcohol concentrations are generally in high ranges, even when they drive. Studies show that adult drivers with a BAC of .17 or higher typically have a drinking pattern that is compulsive and uncontrolled.

- Drinking drivers who are not compulsive drinkers but who are overly aggressive, and as a result, are not good drivers under most circumstances. Alcohol moves them from bad to worse.
- Drinking drivers to whom neither drinking nor driving is usually a problem. They may occasionally drive when they have had too much to drink.
- Drinking drivers who are unusually sensitive to the effects of alcohol. The effects on their driving may be pronounced.
- Drinking drivers who are learners or beginners in both drinking and driving. Their experience and skill in each area is limited and therefore their driving behavior may be uncertain and unpredictable.
- Drinking drivers who because of age or illness are losing or have lost their driving skills. Alcohol accentuates this loss of skill.

Instructor Note: Students should be asked to categorize themselves.

- The best advice is: "If you drink, don't drive; and if you drive, don't drink."

TOLERANCE

Individuals differ somewhat in how they are affected by a given amount of alcohol. Two people of the same body size, weight, and age may experience different degrees of effects from alcohol. The ability of the body to be less influenced than expected by the effects of alcohol is called tolerance. There are two types of tolerance: initial and acquired. Initial tolerance refers to a person's tolerance due to biological makeup. Acquired tolerance refers to cellular changes resulting from repeated drinking, requiring the individual to drink more alcohol to get the same effect as before.

Some people are very susceptible to the effects of alcohol, even at a low blood alcohol concentration. Almost anyone who has any drinking experience is familiar with those who have widely different tolerances for alcohol. Some drinkers are called "thimble kidney" or "two beer so-and-so" while those on the other end of the continuum are said to have a "hollow leg". Some people fall asleep while others who have drunk as much seem to be just getting started. Those who are able to withstand the effects of alcohol or who must have more of the drug than most others to achieve a desired level of intoxication are said to be "tolerant" of the effects of alcohol. Acquired tolerance is developed by all people who drink regularly over a period of time. It is characterized by the ability of the drinker to withstand the effects of alcohol through practice. Acquired tolerance frequently results in an experienced drinker needing 50 to 100 percent more alcohol to feel the same level of effect. Initially, a drinker who may become intoxicated from two beers may come to require three or four to achieve the same level of intoxication.

In many cases, what is referred to as the ability to "hold one's liquor" is actually tolerance. Because of tolerance, alcoholics often have high BACs when arrested for a drinking and driving offense. Addictive substances, such as alcohol, require increasing doses to get the same level of intoxication or high. Although someone who is dependent on alcohol may come to need twice as much alcohol as they previously used in order to get the same effect, this is not nearly the level of acquired tolerance associated with some drugs. For example, someone who is dependent on narcotics may increase their dose at least tenfold.

More striking than "acquired" tolerance may be "initial" tolerance. Initial tolerance refers to the genetic, inborn capability of the body to respond to and process alcohol. People vary widely in the amount of alcohol they can tolerate, independently of their acquired tolearnce. Some people, however hard they try, cannot drink more than a small amount of alcohol without developing a headache, upset stomach, or dizziness. Others seem able to drink large amounts with hardly any ill effects; they appear to have been born with this capacity, not to have developed it entirely from practice.

Differences in tolerance for alcohol apply not only to individuals but to racial groups. For example, nearly half of Orientals develop, to some degree, flushing of the skin, increased heartbeat, discomfort, and nausea after drinking only a small amount of alcohol. To them, drinking is unpleasant and can even be painful.

Withdrawal symptoms occur when the use of alcohol (or many other drugs, for that matter) is discontinued. The body has become accustomed to alcohol and has a withdrawal reaction. The severity of withdrawal symptoms varies from individual to individual. Common symptoms include headaches, dizziness, upset stomach, sweating, nervousness or anxiety, changes in pulse rate, and general feelings of malaise. Diarrhea or vomiting may also occur. A few individuals experience more severe, even life threatening, symptoms and require acute medical care.

Long-term heavy alcohol users sometimes develop a reduced tolerance for alcohol, as a result of liver damage and thus a reduced ability to oxidize alcohol.

EFFECTS OF ALCOHOL ON THE BODY

It is estimated that alcohol is involved in 25 to 50 percent of all admissions to medical centers and mental hospitals. Chronic alcohol consumption leads to toxic effects throughout the body.

The most common site of injury is the liver, the organ most responsible for ridding the body of alcohol. In the early stages of alcoholic liver disease, the liver becomes fatty, a condition that may progress to hepatitis. After an extended period of chronic drinking, the liver structure may be affected, followed by a breakdown in its functional capacity. The result is cirrhosis—an often fatal disease (9,166 persons died of alcohol-induced cirrhosis of the liver in 1980).

Many organs and parts of the body may be harmed indirectly by alcoholic liver disease. Excessive alcohol consumption also may directly injure the stomach, intestines and pancreas. As alcohol and its by-products travel through the body in the blood stream, they may affect the cardiovascular system, the nervous system, and the endocrine system. Furthermore, there is evidence of a strong association between chronic alcohol use and cancer of the stomach, large intestine, pancreas, and liver.

Alcohol has destructive effects on the production of hormones related to sexual functioning. Fewer male hormones are present in men who are heavy alcohol users. This can lead to decreased sex drive and low sperm production. Women are affected also, frequently with reduced or missing menstrual periods.

Alcohol abuse can result in nutrition-related deficits in the body. These nutrition problems can cause problems in protein metabolism and can cause vitamin-related disorders such as anemia.

Let's follow the course of alcohol as it enters your body and the effects it leaves behind.

Alcohol and the Digestive System

The Mouth and Esophagus. Cancers of the mouth, tongue, pharynx, and esophagus occur more often in heavy alcohol users.

The Stomach. Drinking can produce bleeding in the stomach. While alcohol alone does not cause gastric bleeding in normal subjects, it significantly increases blood loss in persons with damaged stomach linings. Aspirin commonly taken by alcohol abusers to alleviate discomfort may further aggravate stomach injury.

The Intestine. The intestine is an important site for the absorption of nutrients into the blood stream. The small intestine is exposed to higher concentrations of alcohol than any other organ in the body except the stomach. The small intestine may demonstrate structural injury due to alcohol consumption.

Vitamin absorption is adversely affected by alcohol. Alcoholics have shown a significant reduction in the absorption of folic acid (a B-vitamin). Folic acid absorption can improve with the discontinuation of drinking or with nutritional supplementation.

The Pancreas. More than 75 percent of the cases of chronic pancreatitis in the United States occur in alcoholics. Problems in pancreatic function can be detected in half the heavy users of alcohol, even in those with no apparent symptoms. Steady alcohol consumption for six to twelve years is necessary before pancreatic symptoms occur. Progressive deterioration of the pancreas continues even after the individual stops drinking.

Alcohol and the Liver

Metabolism of Alcohol. Alcohol is not effectively stored in tissues, and less than ten percent can be eliminated through the kidneys, lungs, and skin. Unlike other major sources of calories, alcohol cannot be stored either in the liver or in other tissues; it must therefore be metabolized immediately in preference to all other foods. Ninety percent of alcohol is oxidized or broken down by the liver. It is the liver's role in alcohol oxidation that results in the damage that alcohol causes the liver.

Alcohol oxidation produces acetaldehyde which, in turn, is metabolized to acetate. These chemical changes take place in the liver. Acetaldehyde adversely affects many tissues. It appears to interfere with vitamin B6 metabolism. Acetaldehyde has been shown to impair the synthesis of proteins in the heart and can inhibit protein secretions by liver cells. Finally, acetaldehyde can reduce the liver's ability to oxidize fatty acids. The alcoholic may therefore be victim of a vicious cycle; high acetaldehyde levels and chronic alcohol consumption impair the liver's function, which decreases acetaldehyde metabolism, which accelerates the accumulation of acetaldehyde, all leading to further liver damage.

Pathology. There are three types of liver damage associated with alcohol use: alcoholic fatty liver, alcoholic hepatitis, and alcoholic cirrhosis. Accumulation of excess fat in the liver is the first problem to appear and thus is the most common liver disorder associated with alcohol abuse.

People with fatty livers show no outward symptoms or problem. This condition can be reversed if drinking is stopped. Alcoholic hepatitis is characterized by inflammation and death of individual liver cells. One-fourth of male alcoholics and one-half of female alcoholics develop this form of hepatitis. This hepatitis causes death in 10 to 30 percent of the afflicted individuals. Eventually the entire structural and functional capacity of the liver is impaired, resulting in cirrhosis, the most severe and irreversible form of liver disease caused by alcohol.

Other Metabolic Effects. Chronic drinking is associated with a raised metabolic rate, which is characterized by increased oxygen consumption, inefficient use of calories, increased heat output, and weight loss.

Alcohol and Muscle Systems

Heart Muscle. An association between alcoholism and heart disease has been recognized for more than 100 years. Damage to the heart muscle (cardiomyopathy) is often found in chronic, heavy drinkers. It generally appears in patients with a long history of alcohol consumption, usually more than ten years. The major symptoms of this disorder are chronic shortness of breath and signs of congestive heart failure, such as edema, chest pain, fatigue, palpitations, and blood-stained sputum.

Alcoholic cardiomyopathy does not occur suddenly. The severity of the illness appears to be related directly to the duration of alcohol abuse. The prospect for recovery is reasonably good, if the individual stops drinking, but recovery is slow and may require five to six years.

Alcohol depresses the heart muscle function at blood concentrations found during alcohol intoxication.

Skeletal Muscle. Myopathy, the disease of skeletal muscle, has been associated with alcohol abuse for about 120 years. Some alcoholics will have a history of muscle cramps, weakness, and occasional episodes of dark urine which is thought to be due to myoglobin being released by damaged muscle tissue.

Alcohol and Blood Disorders

The diet of most alcoholics contains significantly less than the daily minimum requirement of B-vitamins, particularly folic acid and riboflavin. Part of this is due to the fact that alcohol interferes with the body's ability to use some of the B-vitamins.

Deficiency of B-vitamins and a diet lacking in protein result in fewer new blood cells being produced and an anemic condition. This condition can be reversed after resuming a normal diet. Poor nutrition plays an important role in the anemia and the abnormal iron levels seen in heavy alcohol users, particularly those with liver disease.

Chronic drinking interferes with the body's ability to utilize vitamin B-6. This can cause some forms of anemia as well as changes in the bone marrow, peripheral neurological disease, convulsions, and worsening of liver disease.

Alcoholics have a reduced number of white blood cells. This can affect the body's ability to fight illness. There is some clinical evidence which suggests that chronic alcohol use weakens the immune system.

Alcohol and Kidney Disease

Chronic alcohol users may have enlarged, damaged kidneys. They are 20 times as likely to suffer tissue loss in their kidneys as those who drink moderately or not at all.

Alcohol and the Lungs

Chronic obstructive lung disease is common among alcohol-abusing males, especially smokers. Some types of pneumonia are more likely to occur in heavy alcohol users than in the general population. Tuberculosis is a well-recognized health problem in malnourished alcoholics.

Alcohol and the Endocrine System

Gonadal and Adrenal Effects. Intoxication can lead to temporary impotence. Even more significant is that low levels of male hormones are found in men who are chronic, heavy drinkers. Thus, 70 to 80 percent experience decreased sex drive and/or impotence. In addition, 70 to 80 percent of such men show both deterioriation of the testicles and diminished sperm production.

Not only do these men have fewer male hormones, but they also produce excess female hormones. Fifty percent of men with alcoholic cirrhosis develop feminine pubic hair patterns, and 20 percent develop enlarged breasts. These symptoms persist even in the absence of intoxication and are due in large measure to alcohol-induced tissue injury.

Females who are chronic, heavy users of alcohol often have reduced or absent menstruation, infertility, and loss of secondary sex characteristics including reduced breast and hip size.

The Hypothalamic-Pituitary-Adrenal Axis. The hypothalmus, deep inside the brain, is the master hormone controller. It sends hormones to the pituitary gland, which in turn emits hormones to other glands, including the adrenal gland. This system is called the hypothalmus-pituitary-adrenal axis. Early studies on animals showed that alcohol changes the activity of the adrenal cortex.

Alcohol and Cancer

Evidence for the strong associations between chronic alcohol use and cancers of the mouth, throat, vocal cords, and esophagus has existed for many years. More recent studies indicate that alcohol may play a role in cancers of the liver, pancreas, stomach, large intestine, rectum, breast, and skin.

There are no supporting data from animal studies to clearly show that alcohol by itself is carcinogenic. While the basis for the relationship between alcohol and cancer is unknown, it is estimated that alcohol is associated with three percent of the cancer deaths in the United States.

The interaction between alcohol consumption and tobacco is particularly striking in terms of cancers of the mouth,throat, and vocal cords, where the total risk is increased in a synergistic manner. As an example, one study indicated that alcohol consumption and heavy smoking produced up to a fifteenfold increase in the risk of oral cancer, compared with the chances of people who neither drank nor smoked. Heavy smoking alone increased the risk only twofold to threefold.

(For further information, see the table "Number of Deaths Attributable to Alcohol" on page III-2 of Appendix III.)

FETAL ALCOHOL SYNDROME (FAS)

Fetal Alcohol Syndrome (FAS) is a pattern of mental and physical defects which may develop in an unborn baby when the mother drinks alcohol during pregnancy. A baby born with FAS may be seriously handicapped and require a lifetime of special care. Less severe defects, such as small body size and lower birth weight, are called Fetal Alcohol Effects (FAE) or Alcohol-Related Birth Defects (ARBD).

Any alcohol intake during pregnancy can potentially damage a developing fetus. Fetal Alcohol Syndrome and its less severe manifestations, ARBD, are the largest single class of birth defects that are 100 percent preventable. A diagnosis of FAS involves marked deficiency in all three of the following categories: growth, brain function and facial characteristics. When a child has a marked deficiency in one or two of these areas (and maternal alcohol use is confirmed), then the terms ARBD or FAE are utilized.

FAS symptoms can include:

- Growth deficiencies: small body size and weight, slower than normal development and failure to catch up.
- Skeletal deformities: deformed ribs and sternum; curved spine; hip dislocations; bent, fused, webbed, or missing fingers or toes; limited movement of joints; small head.
- Facial abnormalities: small eye openings; skin webbing between eyes and base of nose; drooping eyelids; nearsightedness; failure of eyes to move in same direction; short upturned nose; sunken nasal bridge; flat or absent groove between nose and upper lip; thin upper lip; opening in roof of mouth; small jaw; low-set or poorly formed ears.
- Organ deformities: heart defects; heart murmurs; genital malformations; kidney and urinary defects.

- Central nervous system handicaps: small brain; faulty arrangement of brain cells and connective tissue; mental retardations—usually mild to moderate but occasionally severe; learning disabilities; short attention span; irritability in infancy; hyperactivity in childhood; poor body, hand, and finger coordination.

Any women who hopes to give birth to a healthy baby must be concerned about Fetal Alcohol Syndrome. These effects of alcohol on a growing fetus are the result of the fact that alcohol circulates throughout the body, including the placenta. A developing embryo cannot break down the alcohol as rapidly or as effectively as the mother's system and thus the effects of alcohol are more damaging to it.

Although alcohol consumption at any time during pregnancy is potentially harmful to the fetus, timing and duration of exposure determines the type of damage likely to occur. Early exposure presents the greatest risk for serious physical defects, and later exposure increases the chances of neurological and growth deficiencies or miscarriage.

The first trimester is the most critical time when structural and abnormal features can occur. One alcohol effect during the second trimester is a major risk of miscarriage. In the last trimester, alcohol can impair the rapid and substantial growth of the fetus. The nervous system is at risk also, as this is the period of greatest brain development.

One case of FAS occurs in approximately every 1,000 births. This results in approximately 4,000 FAS births per year in the United States and approximately 60 in Missouri. Full FAS occurs in at least 2.5 percent of pregnancies in which the mother is a problem drinker. The occurrence of ARBD is as much as 20 times higher than FAS. Approximately 50 to 70 percent of women with alcohol dependency have children with ARBD.

A study of children of alcoholic mothers found IQ scores 10 to 19 points lower than controls, as well as retarded development of hearing and speech, eye-hand coordination, abstract reasoning, and practical reasoning. Hyperactivity and short attention span occur more often in the children of alcoholic mothers.

A 10-year follow-up study of adolescents who were born with the Fetal Alcohol Syndrome indicates that its effects are permanent. Mental retardation, physical deformity, and stunted growth have persisted into adolescence. Although good quality of home life is associated with improved social and emotional development in these children, it does not overcome the severe handicaps caused by alcohol exposure during the pregnancy.

Studies suggest that drinking a large amount of alcohol at any one time may be more dangerous to the fetus than drinking small amounts more frequently. A safe amount of drinking during pregnancy has not been determined, and all health authorities agree that women should not drink at all during pregnancy. Unfortunately, women sometimes wait until a pregnancy is confirmed before they stop drinking. By then, the embryo has gone through several weeks of critical development, a period during which exposure to alcohol can be quite damaging. Women who are pregnant or anticipating a pregnancy should abstain from drinking alcoholic beverages. But this can be difficult. With various media messages depicting alcohol in a positive way and social pressure to drink, it can be difficult to avoid alcohol. The first step is to realize the dangers of drinking during pregnancy and to realize the social pressures to use alcohol. To assure a healthy baby, a mother must find a way to avoid alcohol in her own life.

The father can share in this responsibility by supporting the mother's decision not to drink alcohol during the pregnancy. This will help prevent a disability in his child, and he will share the responsibility of giving his baby the best possible start.

SUBSTANCES IN COMBINATION

All substances taken internally, whether swallowed, injected, or inhaled, combine and react with each other. The only safe rules to follow are those laid down by the individual's physician or pharmacist. One of the responsibilities of those who prescribe and dispense prescription drugs is to avoid combining drugs which have known toxic reactions. If the opportunity is present for adverse reaction caused by the combination of prescribed drugs of known doses, the opportunity for advese reaction with the combination of illicit drugs or drugs taken without a physician's direction is multiplied.

Not only do all substances interact with each other (sometimes with moderate, sometimes with pronounced consequences) but also people vary in their responses to substances or the combination of them. This makes combining substances especially risky and hard to predict. A substance or combination of substances which one person may take with little apparent effect can be life threatening or fatal to others.

When combined, some substances have especially toxic effects. Alcohol is one substance which tends to pose a significantly increased danger when used in combination with other drugs, either licit or illicit. Alcohol and many other substances, particulary sedatives, potentiate each other. The cumulative effect of combining alcohol and other sedatives is not like that which would be expressed by a smiple arithmetic progression, i.e. one drink plus one pill equals two doses. Instead the effect can become quite unpredictable, i.e. one drink plus one pill does not equal two, but equals some unknown, greater factor than what would normally be expected.

Another danger inherent in combining alcohol and other substances is the tendency for toxic buildup of those substances which are more difficult to eliminate. Some drugs stay in the system for long periods, making accurate estimates of the amount remaining in the system difficult or impossible.

The half life of valium, a common tranquilizer, is approximately 24 hours (one day). The half life of marijuana is three to four days. Half life refers to the time it takes for one half of the chemical present at any one time to be eliminated from the system. If a person takes 40 milligrams of a drug with a half life of 24 hours, tomorrow he will have 20 milligrams still in his system. The next day 10 milligrams, and so on.

The half life of other substances of abuse is: Heroin, 12 minutes; Cocaine, approximately 1 hours (from 45 minutes to 90 minutes); LSD, 1 hour and 45 minutes; Morphine, approximately 2 hours (from 1 1/4 hours to 3 1/2 hours); Amphetamines, approximately 1 day (from 10 to 34 hours); Methaqualone, approximately 1 day (from 10 to 43 hours).

The body cleans itself of substances in the order of their chemical complexity, with the simpler ones being eliminated first. Alcohol is a relatively simple solution and is oxidzed by the liver ahead of the more complex substances. Thus, more complex substances tend to remain in the system longer when combined with alcohol.

There is no known "safe" high. For each, there is a physiological and psychological price which must be paid.

ALCOHOL ABUSE AND DEPENDENCY

MOTIVATIONS FOR USE

Alcohol's ability to produce a feeling of euphoria is well known. It quite probably does that better than any other substance for the greatest number of people. For most people, the desire to alter feelings and perceptions through alcohol is a relatively harmless one.

Some of the reasons given for drinking alcohol include: (1) physical relaxation; (2) emotional relaxation - the relaxation of normal tension, anxiety, or conflict; (3) mood alteration; (4) facilitate personal interaction; (5) be like others or be part of a group; (6) reduce inhibitions and facilitate sexual experiences; (7) psychological escape or release from emotional conflict; (8) avoidance of responsibility; (9) desire for aloneness; (10) intensification of courage; and (11) increase self-esteem. There are quite probably many other reasons or variations of these reasons. The bottom line is that a general desire to feel better or different prompts most drinking.

(Optional) Students may be encouraged to assess their motivations and the circumstances of the DWI episode either by discussion or by completion of the worksheet on the following pages.

MOTIVATIONS WORKSHEET

______________________ (Name)

______________________ (Date)

This questionnaire is designed to help you (1) reconstruct the events and feelings surrounding your alcohol/drug offense, and (2) review your general feelings and motivations about using.

1. How would you describe the 12 hours preceeding your arrest?

___ A Usual Day
___ An Unusual Day

If unusual, what was unusual? ______________________

2. What was your arrest/charge? ______________________

3. During what part of the day did you start using?

___ Morning (8:00 AM to Noon)
___ Afternoon (Noon to 4:00 PM)
___ Evening (4:00 PM to 8:00 PM)
___ Night (8:00 PM to Midnight)
___ Early Morn (Midnight to 8:00 AM)

4. What was the occasion for using?

___ Celebration/Party
___ After School/Work
___ Disappointment
___ No Special Occasion
___ Other (Specify) ______________________

5. Did you have any of the following strong feelings when you started using?

___ Angry
___ Depressed
___ Lonely
___ Bored
___ Other (Specify) ______________________

6. Where were you when you started using?

___ Home
___ School/Work
___ Friend's Home
___ Car
___ Other (Specify) ______________________

7. Were you alone when you started using?

___ Yes
___ No

8. During the course of this episode with whom did you associate?

___ Girlfriend/Boyfriend/Spouse
___ Friends
___ Acquaintances
___ Stranger
___ Other Relative (Specify) ______________________

9. During this episode did you intentionally avoid any people?

___ Yes (Specify) ______________________
___ No

10. During this episode did you intentionally avoid any places?

___ Yes (Specify) ______________________
___ No

11. When were you arrested?

- ___ Morning (8:00 AM to Noon)
- ___ Afternoon (Noon to 4:00 PM)
- ___ Evening (4:00 PM to 8:00 PM)
- ___ Night (8:00 PM to Midnight)
- ___ Early Morn (Midnight to 8:00 AM)

12. What was your destination when arrested?______________________________
____
____

13. Why did the police stop you?

- ___ Traffic Violation
- ___ Automobile Defect
- ___ Accident
- ___ Other (Specify) ______________
____

14. How many hours had passed since you started using?
____

15. What was your BAC, if applicable? ___
____

16. How much had you drunk? _______
____

17. Did you use other drugs also?

- ___ Yes
- ___ No

If yes, what substances were used and how much?

Substance	Amount

18. What is the most painful part of this episode?

- ___ Financial Costs
- ___ Loss of Driving Privileges
- ___ Telling Family/Friends
- ___ Name in Paper
- ___ ARTOP Attendance
- ___ Feeling of Self-Disappointment

19. Name two activities that the use of alcohol or other substances makes more enjoyable for you:

a. ____________________________
b. ____________________________

20. Name two activities that the use of alcohol or other substances makes more uncomfortable for you:

a. ____________________________
b. ____________________________

21. What do you like most about yourself while using? ____________________
____
____

22. What do you like least about yourself while using? ____________________
____
____

23. What, if anything, would make you want to stop using? ______________
____
____
____
____

ECONOMIC COSTS OF ALCOHOL ABUSE

Whatever the benefits that the use of alcohol presents, the consequences of alcohol use and abuse constitutes one of the major problems of society.

As more becomes known about the toxic effect alcohol has on the human system, more becomes apparent about the cost society pays in terms of lost lives, lost productivity, medical costs, and the myriad of other consequences.

Alcohol use and abuse in 1980 cost Americans an estimated $90 billion. By 1983 the total cost of alcohol use and abuse rose to $117 billion. Included in this figure is more than $3 billion for alcohol-related motor vehicle accidents. Lost production costs were nearly $66 billion.

To put the mammoth figure of the cost of alcohol abuse in more personal terms, alcohol abuse cost every working person in the United States $775 from their annual pay checks.

Alcohol was the direct cause or a contributing factor in the death of nearly 100,000 Americans in 1980 with almost 26,000 dying in alcohol-related automobile accidents. The percentage of intoxicated drivers who were killed in automobile accidents has dropped from 50% in 1980 to 43% in 1984, but it remains a tragic figure.

(For further information, see the tables at the beginning of Appendix III.)

PATTERNS OF ABUSE AND DEPENDENCY

The number of Americans who drink outnumber those who do not by approximately two to one. Most find that drinking alcohol is a pleasant experience. A few people find that drinking a small amount of alcohol can be unpleasant. For example, many Orientals develop flushing of the skin which may be accompanied by nausea after only a couple of drinks. At the other extreme are those who respond to alcohol much more positively and emphatically. In a culture where drinking is the norm rather than the exception, almost anyone who could become alcohol dependent will do so.

Almost all people drink for the same basic reason, to feel different or better. Approximately 85 to 90 percent of people who drink do so in a more or less predictable manner. By practice and experimentation, they determine how much they will have to drink in order to achieve the feeling desired. They do this consistently and pay little or no emotional price for it.

The other, the 10 to 15% who become alcoholic, use alcohol in the beginning in the same way. However, dependency on alcohol gradually emerges. The person who is dependent on alcohol often is unable to control his drinking, a matter which seems so easy to the vast majority of drinkers. Each drink may seem to demand another. Even when the individual has made firm decisions beforehand about the amount he will drink, he may find that his drinking is out of control. This has such a debilitating effect on some drinkers that they choose not to make the decisions, rather than face the constant frustrations of not keeping commiments made to themselves or others.

Dependency on alcohol has both a psychological and a physical component. The psychological part is generally associated with compulsive use which often creates emotional and social problems. Those who drink in a destructive, unhealthy manner against their better judgement, against the law, and against their own values, are quite probably engaged in compulsive use.

For those who are not dependent on alcohol, the desire to feel better through alcohol use is as normal as is the desire to put on a warm coat in winter and as a rule they give little or no thought to "why" they had a drink. To many alcoholics, the desire to feel better through alcohol becomes the focus of their thoughts. They give long, complicated, plausible sounding explanations why they drank, e.g. job, spouse, kids, health, money, school, sweetheart, etc. There may be a kernel of truth to their rationalizations, i.e. they may be in trouble with their spouse or their health may be deteriorating. Frequently, the problem has been caused or complicated by drinking itself. Drinking can become both the cause of problems and a way of coping with those same problems.

The reasons or excuses for drinking become very important to the person depending on alcohol. Without his excuses, he would have to face the reality of his behavior. Even if all the alcoholic's problems were somehow magically erased, he might use that as an excuse to drink and celebrate. It is not the excuse nor the reason which is important, but the drinking behavior itself.

Stages in the progression toward alcohol dependency have been described as "early," "middle," and "late". Many alcoholics have noted that their condition progressed along the following general course.

Early Stage

- Gulping drinks
- Pre-party drinking, in which the drinker's desired level of use is greater than in the household or at the party.
- Sneaking drinks, because the drinker's desired level of use is greater than that of the household or that at the party.
- A blackout when drinking, in which the drinker does not remember a portion of what happened while drinking.

- Stockpiling liquor to ensure a continuous supply.
- Hiding liquor, to protect the supply and conceal the actual amount consumed.

Middle Stage

- Denying problem, by quitting occasionally to show that the drinking is under control.
- Rotating sources of liquor, by patronizing different bars and liquor stores, to prevent anyone from tabulating the total amount consumed.
- Refusing drinks or drinking very moderately when with others, then finding opportunities to drink from a hidden supply.
- Declining self-esteem and its replacement with grandiose behavior.
- Switching type of alcoholic beverage consumed.
- Increasing guilt and remorse.
- Increasing anxiety, dealt with by increasing quantity consumed.

Late Stage

- Drinker craves alcohol and drinks throughout awake hours.
- Malnutrition develops as drinker deletes meals and bodily functions become impaired.
- Isolation from others to conceal the alcohol dependency and its obvious physical effects.
- Family isolation from others to conceal the drinker.
- Declining job performance.
- Alcohol-related accidents.
- Drinking during the night to bring about sleep.
- Uncontrollable shaking.
- Brain deterioration.
- Hallucinations.

- Convulsions.

- Possible death.

This progression is not identical for every single person. Even when progression occurs, it may not follow a uniform pattern. Symptoms that are minor in an early stage may appear later in a different form or to a greater degree. "Hitting bottom" may mean jail or a suicide attempt for one, while for another it may be the result of an accumulation of less dramatic events, such as threat of job loss or a marital separation.

Patterns of use and stages of dependency to drugs other than alcohol can be described similarly, although the specific effects of a given drug may vary in a number of ways from alcohol. Examples include anxiety attacks or asthma after marijuana use and depression following cocaine use. Again, not everybody who tries a drug necessarily progresses through the stages of dependency. Some users quit after experimentation or occasional use, and others may remain in the "early" or "middle" stages of dysfunctional, regular use for a long period of time. However, the user who becomes dependent on a drug is unlikely to ever break free of it without making an enormous effort to do so and will struggle to maintain a "sober" or drug-free status.

The terms "alcoholic," "drug addict," "alcoholism," and "drug dependency" are simplistic terms in that they seem to indicate there is a single type or profile. There are many types of alcoholics and alcoholisms. If a person with a serious drinking problem does not fit a particular profile or description, this does not mean that there is no serious problem or alcoholism.

Every person is a unique individual, so it may be tempting to say that there are ten million types of alcoholism for ten million alcoholics. Such a description is a bit extreme and not very scientific. However, it is very important to recognize that there is no "true" or "typical" alcoholic. Alcoholism is not a single disease entity any more than cancer is. There are numerous types of cancer, just as there are numerous types of alcoholism.

E. M. Jellinek, a physician who was a pioneer in the scientific study of alcoholism, outlined the best-known classification of alcoholism. He identified five types of destructive, damaging drinking. His types used letters of the Greek alphabet to avoid language that might imply theories as to cause.

Alpha. Alpha is a *psychological* dependence on alcohol to boost morale and self-confidence or to relieve emotional pain. These persons drink too much and at the wrong time, which can result in family arguments, offense to others, absenteeism from work, and a drain on the family budget. Physical depenndency or addiction with withdrawal symptoms is usually not present. Alpha alcoholism can develop into the more serious gamma alcoholism, but it can continue for years and years with no progression.

Beta. Beta is characterized by *social* dependence on alcohol. It is common in occupations or other groups where "everybody" gets drunk every weekend. This sense of "everybody does it" makes it hard for the individual to see that there may be a problem. Social or legal problems may develop. Physical problems such as cirrhosis and gastritis may develop.

Gamma. Gamma is a more serious type of alcoholism that is frequently seen in American males. It may begin as Alpha or Beta and progress to Gamma. There is a progressive loss of control over how much one drinks. Often the person can decide whether or not to drink, but once he begins to drink he has little or no control over when to stop. There is an increase in tolerance, and withdrawal may include shakes or tremors for days after stopping drinking. Search for reasons why these people drink is meaningless; they drink because they are alcoholics.

Delta. Delta is often called the maintenance drinker. This type of alcoholic drinks frequently but controls how much is consumed. The primary characteristic is inability to abstain, rather than inability to control how much is consumed. Unlike Gammas, Deltas have trouble "going on the wagon" for even a day or two, yet they seldom appear to be drunk. However, Deltas are often physically dependent and have withdrawal symptoms if deprived of alcohol by accident or other circumstances. Social attitudes that favor regular drinking play a major role in the development of Delta alcoholism. This alcoholism is the most common type seen in France and other wine-drinking countries, such as Chile. American women demonstrate Delta alcoholism, more frequently than men. Deterioration is so gradual that Delta alcoholics may not realize that they have any physical or social problems. Their drinking seldom causes a crisis.

Epsilon. This is the periodic or binge drinker, who abstains without difficulty for long periods. But once drinking starts, it continues until the person passes out. The period of abstinence may be a week, a month, or a year. When abstaining, the Epsilon alcoholic has no craving to drink and no struggle to maintain sobriety.

Zeta. A sixth type, which was not specifically mentioned by Jellinek, is often noted. Zeta alcoholics get violent when they drink. A marked personality change of any type is a symptom of alcoholism, and the person who gets violent or vicious after a few drinks is headed for serious problems.

Other classifications of alcoholism have been suggested on the basis of personality types, reasons for drinking, and overly friendly or belligerent responses to alcohol. However, the types outlined by Jellinek are commonly recognized. While they are not absolute and while Jellinek himself indicated that there are probably many other types of alcoholism, these types do make the point that there is no typical or true alcoholic. It is also possible for the same individual to move from one type to another at different points in his life.

Statistical probability alone suggests that some of the students in the class have an alcohol dependency or are developing one. National statistics indicate that 13 percent of the adult population will eventually develop a serious problem with alcohol. Ten percent of drinkers consume 50 percent of the booze. National statistics also indicate that approximately one-half of the people who get a first DWI have a serious problem with alcohol. Because alcohol dependency is a severe and dangerous form of addiction, recognizing its symptoms and stopping its progression is extremely important to prevent further social, legal, and health problems.

DISEASE CONCEPT OF ALCOHOLISM

Alcoholism is a problem which has plagued man since he first learned to make alcohol. References to alcohol and drunken behavior abound in our literary, historical and religious writings. With some notable exceptions, most efforts to deal with alcoholism in the past have been based on the premise that alcoholism was a sign of immorality or personal weakness.

The first real breakthrough for another view of alcoholism came in 1935 when Alcoholics Anonymous (A.A.) was founded. Alcoholism is described in "This is AA" in the following terms: "Most of us agree that, for us, alcoholism could be described as a physical compulsion, coupled with a mental obsession. We mean that we had a distinct physical desire to consume alcohol beyond our capacity to control it, and in defiance of all rules of common sense. We not only had an abnormal craving for alcohol, but we frequently yielded to it at the worst possible times. We did not know when (or how) to stop drinking. Often, we did not seem to have sense enough to know when not to begin."

- In 1951 the World Health Organization identified alcoholism as a disease.

- In 1953 the American Psychiatric Association classified alcoholsim as a disease.

- In 1956, the American Medical Association defined alcoholism as a disease in the following terms:

  > "Alcoholism is an illness characterized by preoccupation with alcohol and loss of control over its consumption such as to lead usually to intoxication if drinking is begun; by chronicity; by progression; and by tendency toward relapse. It is typically associated with physical disability and impaired emotional, occupational, and/or social adjustments as a direct consequence of persistent and excessive use of alcohol."

- Dr. David Ohlms, a prominent Missouri physician who specializes in the treatment of alcoholism, gives a shorter definition:

  > "Alcoholism is a chronic, progressive, incurable disease characterized by loss of control over alcohol and other sedatives."

- Father Joseph Martin, a prominent lecturer in the field of alcoholism recovery, uses the acronym "WART" to define alcoholism: "With Alcohol Repeated Trouble".

- Another brief definition is: the compulsive use of an addictive substance, alcohol.

A modern view of alcoholism sees it as being primary, that is a condition in its own right which is not "caused" by something else. Alcoholism was once thought of as secondary to some other mental or psychological disorder. It was believed that once the other problem was diagnosed and cured, the alcoholism would go away. Alcoholism may be prompted and promoted by many different reasons but to have any success at all with its treatment, one must first address the alcoholism itself. As a disease, alcoholism is:

- Identifiable. The symptoms can be described. Chief among them is the compulsion to drink, evidenced by drinking that is inappropriate, unpredictable, excessive and/or constant.

- Primary. It is not the product of some underlying condition. However alcoholism can cause or aggravate other conditions.

- Progressive. As alcoholism continues, it gets worse with more severe emotional and physical consequences. The person with alcohol dependency who continues to drink will have a life span on the average 12 years shorter than the non-alcoholic.

- Chronic. Once someone becomes alcoholic, they are subject to relapses.

At one time the alcoholic may be able to drink with some degree of control and predictability. At other times he will have no control over time, place, or amount. Usually in the early stages, the alcoholic demonstrates greater control for most of the time and only occasionally will drink more than intended. However, gradually the alcoholic's ability to predict how much he will drink or his behavior when drinking will decrease. This lack of predictability is one of the most common symptoms of the disease.

As is true with all diseases, no two people demonstrate exactly the same symptoms at the same time, or to the same extent. But as is also true of other chronic diseases, once a person is alcoholic he continues to be so afflicted throughout his life. He will typically have the lack of predictability over the drug alcohol if he drinks again, even after long periods of total abstinence. The lack of predictability may be immediate or it may gradually return, if drinking is resumed.

(See page III-15 in Appendix III for a further description by Vernon Johnson of the disease concept of chemical dependency.)

There is an Eastern expression which says, "The beginning of wisdom is to call things by their right name." This is extremely appropriate for the person who has alcohol dependency. It is difficult to cure alcoholism by treating something else. To treat alcoholism, the sufferer must be able to call the problem by its right name. Often, the alcoholic is unable to accurately see his affliction and what is happening to him. It was commonly thought that the alcoholic must "hit bottom" and become a complete mental, moral, psychological, physical, and financial wreck before he would be able to accept help. However, many experts have recognized that there is a way of approaching the alcoholic and breaking through his defenses which are used to shield the truth. Once these defenses are penetrated, the alcoholic is able to call things by their right name again and take the first steps toward recovery. The earlier the alcoholic faces the problem and begins on the road to recovery, the better are his chances. It may be true that there is no such thing as a "hopeless" alcoholic, but statistics indicate that the longer the disease has had to establish itself, the more difficult it is to treat and to recover.

GENETIC FACTORS

There is strong evidence that certain individuals have a genetic predisposition to alcoholism. There is a tendency for alcoholism to "run" in families. If a parent is alcoholic, the likelihood of the children developing alcoholism dramatically increases. The question then arises - Is the fact that alcoholism tends to run in families due to socialization and learning or is it due to a genetic predispostion? Studies tend to indicate that genetic predisposition is the more powerful reason.

The Scandinavian Adoption Studies followed identical twins who were adopted at birth. Those children who were born of an alcoholic parent had a higher incidence of alcoholism themselves than did children whose parents were not alcoholic. A 1983 study documented a rate of alcoholism among sons of alcoholics adopted at an early age that was four times as great as that of a control group of adoptees. Further, this greater rate among sons of alcoholics did not differ significantly whether they were raised by alcoholic or non-alcoholic adoptive parents. Another study cites an alcoholism rate of four times the control group of adopted away daughters of alcoholic mothers.

The Scandanavian Adoption studies identified two types of alcoholism which seem to be genetically transmitted: (1) milieu- (environmental) limited and (2) male-limited. The milieu-limited type occurs more frequently, includes both sexes, requires environmental provocation and generally is less severe than is the other type. The male-limited type occurs when the biological father is alcoholic and tends to transmit alcoholism only to male offspring. This type tends to be more severe, has an earlier onset, is characterized by fairly serious legal difficulties, and often requires extensive or repeated treatment.

Research has also documented that the ethanol reactions of sons of alcoholics differ from normal or social drinkers. When given low to moderate doses of alcohol, the sons of alcoholics rate themselves significantly less intoxicated than does the control group. This could mean that the sons of alcoholics have an impaired ability to fully experience the effects of moderate doses of alcohol. It is more difficult for them to know when they are becoming intoxicated. This apparent biological tolerance to alcohol could possibly prompt the sons of alcoholics to drink more to attain the same effects others feel at lower BAC's. This then could be a factor in the early heavy drinking of many alcoholics.

Other data which supports the genetic predisposition toward alcoholism comes from animal breeding experiments and studies with humans which identify brain wave differences and biochemical markers associated with alcoholism.

Breeding experiments with animals provide evidence that genetic factors influence alcoholism. Animal lines have been bred that differ in their response to alcohol, their oxidation or breakdown of alcohol, the rate at which tolerance develops, and the severity of withdrawal symptoms.

The brainwave and biochemical studies have identified specific markers which support the premise that alcoholism can be transmitted genetically. Researchers have been able to identify brainwave differences in both alcoholics and their offspring. Notable among these differences is the P_3 wave, which is markedly reduced in alcoholics.

One researcher tested the hypothesis that the P_3 brain wave pattern was an antecedent of alcoholism rather than a consequence of it. Twenty-five boys age 12 who were sons of alcoholics were compared with a control group of 25 boys, matched for socioeconomic status and age, who had no family history of paternal alcoholism. None of the subjects had ever drunk alcohol or used illicit drugs. Significant differences in the P_3 voltage were found between the two groups. The high-risk boys showed a pattern similar to that in abstinent chronic alcoholics. This supports the hypothesis that a low P_3 brain wave pattern is present before alcohol abuse even begins.

Much progress is being made in the identification of chemical markers related to genetic transmission of alcoholism. Interest is being focused on the enzymes which breakdown or oxidize alcohol. The reaction that many Orientals have to alcohol (a flushing of the skin and nauseau) has been related to the absence of a form of the ALDH (aldehyde dehydrogenase) enzyme. It is believed that the absence of this enzyme may account for the low rate of alcoholism among Orientals.

Another potential biochemical marker of inherited susceptibility to alcoholism is a low level of MAO (Monoamine Oxidase) in blood platelets. The level of MAO is basically genetically determined. Alcoholics and their children have lower levels of MAO. A relationship has been established between the male-limited type of alcoholism and low levels of MAO. In the future, there may be a blood test which can identify those at increased risk of alcoholism.

EFFECTS OF ALCOHOL DEPENDENCY ON THE FAMILY

Alcohol abuse and dependency do not occur in isolation. We will discuss the family dynamics of alcohol abuse and dependency and recognize the consequences and options for family members.

The drinker's excessive use of alcohol has a negative effect on other people, including the spouse, children, parents, friends and employer. It is estimated that every problem drinker affects at least four other people who do not themselves drink excessively. Family members can develop serious emotional difficulties in trying to live with the problem drinker and change the drinker's behavior. Some authorities theorize that the significant others become nearly as ill as the problem drinker. An individual's alcohol abuse becomes a family's problem. Observations of a large number of families trying to contend with alcohol problems suggest a rather consistent set of family dynamics.

A recent movement dealing with the impact of alcohlism on the family is Adult Children of Alcoholics (ACoA). This group advances the idea that anyone raised in a dysfunctional family, such as one marked by alcoholism, is affected. The question is not "Are they affected?" but rather "How much have they been affected?"

Family Roles and Rules

It has been estimated that there are nearly 10 million children under the age of 18 living with an alcoholic parent. Roles of children raised in a family where a parent experiences substance abuse or dependency have been described and better understood in recent years. Sharon Weigscheider-Cruse identifies the common roles of children as hero, scapegoat, lost child, and mascot.

The "Hero" usually is the first born and as a rule is looked upon as the "golden" child. Most often heroes attract positive attention through their socially desirable behaviors. They often excel in academics, sports, or social organizations and bring favorable recognition to themselves and their family. The appear quite mature, responsible, and healthy. However, they frequently have emotional problems later in life. They may feel driven to succeed or to be perfect. They focus on accomplishment rather than feeling.

The "Scapegoat", usually the second child, is quite often deprived of the positive attention which is given to the hero and deprived of the immense energy which the parent with substance abuse or dependeny may require. The scapegoat gets attention in negative ways through disruptive and acting out behavior. The scapegoat often is blamed for many family problems which are not really his fault. The scapegoat comes to act in a manner which will justify the accusations. The scapegoat often develops alcohol or drug problems.

The "Lost Child" tends to be withdrawn, a loner whose most valuable contribution to the family is that he or she does not disrupt or demand attention. Because the family's attention is focused elsewhere, there is little attention available anyway. As the lost child gets older, they may struggle with loneliness, depression, and low self-esteem.

The "Mascot" usually is the family clown, the one who will do virtually anything to make the other family members feel better. The mascot takes on the job of relieving tension and lessening crisis. They are very sensitive to the moods and needs of others. When mascots reach adulthood, they have trouble recognizing and meeting their own needs and have trouble dealing with stress.

It is possible for the children to switch roles or for one person to assume more than one role at one time. For example, if the "hero" moves away, the family may respond to this act by promoting another member to "hero".

It is important to remember that these roles are uncomfortable and confusing to anyone in them. The symptoms of one family member, while different from those of others, are all symptoms of a dysfunctional family. (For further information, see the chart on page III-22 of Appendix III.)

Another trait of alcoholic or dysfunctional families is the presence of certain rules which prohibit a healthy family life and tend to perpetuate the dysfunction. These rules, while not stated, are none the less understood and enforced by all family members. Thse rules can be summarized as—"Don't talk, don't trust; don't feel".

"Don't talk" refers to the pattern of internalizing everything and not expressing your feelings or thoughts to anyone. The family member understands that he or she should not disclose to anyone what is going on in the household—financial difficulties, drunkenness, physical/sexual abuse, or threats of divorce. If this rule is carried into adulthood, it makes honestly discussing virtually anything of a personal nature very difficult.

"Don't trust" refers to the family member's learning that the only safe way to exist in an alcohol/substance distressed household is to not trust anyone. Others will prove to be unreliable. If this rule is carried into adulthood, it makes forming any sort of partnership with another person very difficult.

"Don't feel" refers to the family member learning to deny and avoid their emotions This rule is one way to avoid the emotional roller-coaster of extreme highs and lows in an alcoholic household. Again, if this rule is carried as a coping skill into adulthood, it makes the individual poorly equipped to deal with life's emotional challenges. The Adult Child of an Alcoholic is more likely to have inappropriate responses to events. For example, the person may have a rather cool or indifferent response to a personal or family tragedy but over-respond to a book, television program or movie.

(Optional) Have students take the CAST (Children of Alcoholics Screening Test) on page 20 of Appendix III. Students should score their own test and be given the scoring guidelines.

Emphasize that one is at high risk for chemical dependency if a parent was alcoholic, especially the son of an alcoholic father and the daughter of an alcoholic mother.

FAMILY RESPONSE TO ALCOHOL DEPENDENCY

We will discuss stages of family response to alcohol dependency and will review the associated emotional difficulties of family members. The following stages typically occur:

- Denial and minimizing the problem
- Isolation and increasing tension
- Frustration and disorganization
- New roles for family members
- Separation from the problem drinker
- Recovery and reunification of the family

Denial and Minimizing the Problem

- Belief that others probably drink just as much. The extent of drinking in one's own family is just more obvious.
- Family members' definition of moderate drinking is too restrictive or simply is not in agreement with the drinker's.
- Current drinking is a result of temporary circumstances. When circumstances change, drinking will subside.
- The concerned family member is overreacting. At times, the drinker does not exhibit excessive behavior.
- Everyone has faults which others must learn to live with. The drinker's faults are tolerable.
- A family's business is its own, and a family should handle its own problems. Outside help should not be sought.

Isolation and Increasing Tension

- Fear of other people detecting the drinking problem increases anxiety of family members.
- Family members develop closer contact with each other as outside relationships are severed.

- Family defensiveness regarding the drinking leads to increased efforts to conceal the problem. The spouse covers for the drinker to prevent reprisals by the employer.
- Spouse evades questions from the children, fearing they will disclose the problem to outsiders.
- Problems other than drinking are magnified as family members spend more time together. Friction increases. The drinking behavior is blamed for these problems.
- As the drinking becomes established as the cause of interpersonal and family problems, anger toward the drinking increases.
- Expression of resentment leads to further drinking
- Verbal, and perhaps physical, conflict increases.
- Efforts to halt the increasing problems and conflict through discussion are usually unsuccessful. This lack of success is experienced by the spouse as a feeling of failure.
- Spouse's feeling of self-worth declines.
- Periods of sobriety cause hesitation and ambivalence by spouse.
- During times of sobriety, drinker reaffirms spouse's worth, and spouse develops a desperate need for these reassurances.
- Efforts to control drinker's behavior bring inconsistent results, and frustration increases.
- Family members try to maintain traditional roles during periods of sobriety, but abandon them during periods of intoxication.
- Spouse continues to shield the children from the drinking problem, helping to preserve the children's affection toward the drinker. The spouse's need for emotional support may only be met by the children. The spouse becomes intolerant of the children's allegiance to the drinker. Spouse begins to experience self-pity because of this dilemma and increased resentment toward the drinker.

Frustration and Disorganization

- Spouse begins to feel hopeless.

- Spouse stops constructive attempts to change the drinker. Instead, the spouse attempts to reduce frustration through verbal attacks or emotional retreat.

- Children increasingly become the pivot point in the conflict between the parents. Spouse ceases to conceal the drinker's problem from the children, as the need for their allegiance becomes crucial.

- The threshold of violence between spouse and drinker increases. The spouse may feel a bewildering combination of relief and shame for initiating or responding to violence to relieve the anger, frustration, and resentment.

- Spouse's involvement in violence becomes frightening upon introspection.

- As affection wanes, spouse begins avoiding sexual contact with the drinker. Drinker responds by accusing spouse of frigidity. Spouse begins to feel sexually inadequate.

- Crises occur which come to the attention of outsiders or which need outside help. Lessened feelings of social status and self-respect result.

- Everyone in the family feels trapped in an intolerable situation with no solution. They feel alone and helpless and unable to communicate the realities of the situation to others.

New Roles for Family Members

- Problems in the family reach a point that the spouse must establish a new role or leave to regain self-control and self-worth. The spouse who stays in the family abandons the role of spouse and becomes the family manager.

- Spouse attempts to increase control over the drinker through control of the money and deciding whether to rescue the drinker from trouble.

- Drinker recognizes increasing isolation from the family and loss of affection. Drinker responds by feeling that the only alternatives are to re-enter the family's warmth or to destroy the spouse and family.

- Children recognize the spouse as the family manager and ignore or talk back to the drinker. The drinker reacts by becoming hostile or by staying away from home.

- Children realize that they are not the cause of the uncontrolled drinking.

- The drinker becomes increasingly violent or withdrawn.
- As drinker becomes more ill and unpredictable and as economic problems may develop, the family's anxiety increases.
- Spouse gains feelings of self-worth as leadership role in the family increases.
- Drinker may begin to express a desire to stop drinking and may acknowledge an inability to quit.
- Spouse begins to make contact with social agencies to obtain emergency financial help or protection. Spouse may discuss problems with a counselor or an Al-Anon member. By this time, spouse has begun to learn about alcoholism.
- Spouse feels relief in discussing problem and hope builds in hearing others' success stories.

Separation from the Problem Drinker

- Spouse begins to receive guidance in managing personal and family problems. Spouse recognizes drinker's total dependence and the severe impact on the drinker of separating or divorcing. The spouse feels responsible for the drinker.
- A severe crisis or the urging of outsiders may finally prompt the spouse to seriously consider divorce. Spouse considers the positive and negative consequences of separating, including the family's ability to retain a home, safety, and adequate care for the children.
- The children, other relatives, and helping agencies may enter the debate of whether the spouse should separate, and they usually offer conflicting opinions.
- Spouse reflects on the marriage, feelings for the drinker, and the way the family has functioned during the drinker's brief absences from the home. Spouse may begin to view the drinker as an unaffordable luxury.
- Spouse may develop an emotional detachment from the drinker, viewing the drinker's behavior as an annoyance and an interference with the newly-established family routine.

Recovery and Reunification of the Family

- The drinker may go for treatment and quit drinking. If the family has separated, the spouse and children may respond to news of the sobriety with an invitation to rejoin the family.

- The reunited family soon is disappointed to discover that sobriety has not brought immediate harmony to the family. Some of the problems were not caused by the alcohol abuse and can no longer be blamed entirely on the drinking behavior. The idealism of a non-drinking marriage is shattered by the realization that problems are still inevitable.

- Fearful of upsetting the recovered drinker, the spouse may be reluctant to promptly and openly discuss problems.

- The spouse, wary of past failures, remains apprehensive about the prospects for continued sobriety. Accordingly, the spouse is reluctant to give up control over the management of the family. The spouse may enjoy this control and power, and resent having to share it with the recovered drinker.

- The spouse may also be resentful that the children reaffirm their affection and devotion to the drinker. The spouse may feel self-pity for having suffered from the drinking but not being the focal point for the family's attention.

- If the recovering drinker is active in AA and frequently attends meetings, the spouse may feel neglected, unless they become active in Al-Anon.

- Ultimately, if sobriety continues, stability returns to the family. However, the rate for separation and divorce among alcoholics and their spouses is seven times that of the general population. (Refer to the Family V-Chart on page 19 in Appendix III.)

Al-Anon is a recovery program for the spouse, friends and relatives of alcoholics (co-dependents). Al-Anon members say that those who love a practicing alcoholic become as sick as the drinker. The main purpose of participation in Al-Anon is not to help sober up the friend, lover, parent, child or spouse, but to free the co-dependent from their own destructive behaviors. Although it shares some of the same principles of recovery as Alcoholics Anonymous, Al-Anon is a separate entity and is not affiliated with AA. While not necessarily a goal of Al-Anon, those in the program feel that if they become healthier and change how they behave, that change will often help the alcoholic to a new awareness of their behavior and then possibly into recovery. They maintain that continued participation in the dysfunctional roles is destructive to their families, the alcoholic, and to themselves.

TYPES OF RECOVERY RESOURCES

Successful recovery often requires a formal treatment program. The type of treatment program depends on the extent of the alcohol problem and the degree of impairment that has resulted. The two basic types of treatment programs are Residential programs, which typically include detoxification services as needed, and Outpatient programs.

A Residential program provides extensive, short-term support to develop sobriety and encourages new patterns of social relationships, self-awareness, and personal development. The program is a total environment 24 hours a day, 7 days a week. Most residential programs have a length of stay of approximately 30 days. Alcoholism is characterized by chronicity and tendency toward relapse. Consequently, most treatment programs in an attempt to counteract those two characteristics, offer a period of extended association with the facility called aftercare. Aftercare usually consists of regular, scheduled return visits to the facility for group and/or individual counseling sessions. Aftercare normally lasts from three months to one year or longer. The longer a person remains abstinent, the better are his chances to continue to do so.

An Outpatient program provides individual and/or group counseling to individuals who do not require, or who no longer require, the total environment of a residential program. Two very different types of outpatient treatment can be described: intensive and supportive. In the intensive programs, the client usually attends classes, lectures, group therapy, and individual therapy sessions several times a week. Clients live and sleep at home and continue to work and maintain other responsibilities. Treatment sessions are usually in the evening. The length of the intensive outpatient program is usually longer than that of a residential program. Most programs are six to eight weeks. The advantages of outpatient to residential are obvious—the person is able to continue with his job and homelife with little interruption, and Outpatient is usually far cheaper than residential treatment. In a supportive outpatient program, the client attends the treatment facility on a regular basis; usually once a week for individual or group therapy sessions.

It is possible for a client to be transferred from one type of treatment program to another as his progress or lack of it determines. A person may need a combination of these types of treatment in succession or may only need outpatient services.

Although Alcoholics Annonymous (AA) is not a formal treatment program, it is often recommended to supplement professional treatment, and for some it may be the only recovery resource needed. AA provides ongoing fellowship and support for sobriety. Alcoholics Anonymous was among the first methods to be successful in assisting large numbers of alcoholics to recovery. Part of their success is attributable to the premise that every member is a resource for every other member. In fact, the founding members discovered that helping each other remain sober was one of the best ways they had to remain abstinent themselves.

Instructor Note: At this time, you may want to hand out a list of the certified residential and outpatient programs in the area and self-help groups. The list should include each program's address, telephone number, and type of services provided. Certification standards require that a listing of area resources be given at least to those students who receive a referral for further services.

Nationwide statistics indicate that one half of those who receive a first DWI offense are harmfully involved with alcohol. Practically all of those arrested or convicted more than once are harmfully involved. Anyone harmfully involved with alcohol needs some form of assistance—AA, professional treatment or both.

Group medical insurance in Missouri is required to include coverage for treatment of alcoholism just like any other type of medical treatment. Group insurors are required to offer drug abuse coverage as an option. However, not everyone has "group" medical insurance. Those who have medical insurance could also have what are called "self-insured" policies or "individual" policies. Treatment is available even if one does not have group medical insurance. State funded programs provide services and charge on a sliding scale based upon family income and size. Often there is no charge or a very low charge.

CONCLUDING TASKS

There are six tasks that need to be accomplished in the concluding phase of the program.

- Administering the Post-test (see page I-5 in Appendix I).

- Completing the Course Evaluation (see page I-23 in Appendix I).

  This evaluation does not have to be signed by the student. The students' opinions are sought to help improve future courses and make them as meaningful as possible.

- Providing assessment recommendations to student (see page I-21 in Appendix I).

  This task should be done by the qualified professional. It may be done during the concluding phase of the program, if it has not been acccomplished earlier. The major disadvantage of providing assessment recommendations in the earlier phases of the program is that some students may be preoccupied with a recommendation for further services.

- Developing a Personal Plan (see page I-22 in Appendix I).

  This plan should be developed after the assessment recommendation has been provided so that any recommendation for further services can be considered by the student. Each student must complete a personal plan.

- Completing the Record of Participation

  A copy of this notice must be given to the student

- Notifying the Court and Department of Revenue

  Within one week after completion of the program, a copy of the Record of Participation must be forwarded to the referring court and the Department of Revenue, if applicable. A copy of the Notice of Assessment Recommendation must also be forwarded to the referring court.

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—APPENDIX I SAMPLE FORMS

Information Notice to Student
Student Registration
Student Information - Responsibilities, Rights, Grievances
Consent to Release Information
Pre/Post Test
Screening Questionnaires
—MAST (Michigan Alcoholism Screening Test)
—MFQ (Mortimer Filkins Questionnaire)
—Twenty Questions (John Hopkins University)
Student Survey
Record of Participation
Notice of Assessment Recommendation
Personal Plan
Course Evaluation
Assessment Note

INFORMATION NOTICE TO STUDENT

Dear ____(Name of Student)____:

________(Name of Agency)________ is certified by the State of Missouri to provide an Alcohol or Drug-Related Traffic Offenders' Program (ARTOP). Completion of the program will assist you in meeting requirements that have been ordered by the court or that are necessary for driver's license reinstatement.

Classes will be held at ________(Address)________ on ________(Dates and Times)________.
________(Directions as Needed)________.

The fee is $____ and must be paid to successfully complete the program. Other requirements for successful completion are:

* arrive on time;
* be free of the influence of alcohol or drugs;
* attend sessions in their proper sequence (unless you request in advance and get approval to attend an alternate sequence);
* complete and sign all required forms;
* complete all class assignments and remain attentive in class; and
* cooperate with the instructor and other students.

When you register for the class, it would be helpful if you would bring the following information: drivers license number, date of offense and, if applicable, date of court conviction. This information will make it easier to report your completion of the program to the court and the Department of Revenue, if your license has been susupended or revoked.

If you have any questions about the program or scheduling, please contact ______(Name)______ at (Telephone Number) . Please notify our office if you are under the age of 21.

Sincerely,

This is a sample notice letter that meets requirements in 9 CSR 30-3.730(4). A program may adapt a notice to better meet its own needs, as long as it is in compliance with standards.

STUDENT REGISTRATION

Name ______________________ Telephone Number (   ) __________.

Address ____
(Street) (City) (Zip Code)

Age: _____ Sex: Male _____ Female _____ Race: White _____ Black _____

Marital Status: Never Married _____ Married _____ Divorced/Separated _____

Are you attending school? Yes _____ No _____

If yes, what grade or year? _____
If no, what was the highest grade you completed? _____

Are you employed? Yes _____ No _____ If yes, how many hours per week? ________

What was the offense that resulted in your attending this program?

DWI _____ BAC _____ Other (specify) ______________________

Is your driver's license suspended or revoked? Yes _____ No ____

If yes, what is the length of the suspension or revocation? ______________

Did you take a breathalyzer or other test related to your offense? Yes _____ No _____

If yes, what was your BAC? _____

Are you attending the program because of an Administrative Revocation? Yes ____ No ____

Did a court or probation office send you the the program? Yes _____ No _____

If yes, which court or office? ______________________

Have you previously attended an Alcohol-Related Traffic Offenders' Program?

Yes _____ No _____

Have you previously been charged with an offense related to alcohol or drug use?

Yes _____ No _____

If yes, please identify the following:

DATE	OFFENSE	RESULT

______________________ ______________
(Signature of Student) (Date)

STUDENT RESPONSIBILITIES

In order to receive credit for successfully completing the program, a student must

- Arrive on time
- Be free of the influence of all mind altering substance
- Attend sessions in their proper sequence (unless you request in advance and get approval to attend an alternate sequence).
- Complete and sign all required forms
- Complete all class assignments and remain attentive in class
- Cooperate with the instructor and other students
- Pay all fees

STUDENT RIGHTS

All students will

- Be treated with respect and dignity and will be free of any type of abuse.
- Receive services regardless of race, sex, creed, marital status, national origin, or handicap.
- Have records kept confidential. Any information about your participation in ADEP can only be released when there is written consent or a court order. Records may be audited for the purpose of ADEP certification. Confidentiality does not extend to a medical emergency, child abuse, or crime committed on the premises or against staff. Confidentiality is assured under the following state and federal laws and regulations: 9 CSR 30-3.700, 42 USC 290, and 42 CFR Part 2.

GRIEVANCE PROCEDURE

A student who thinks that these rules and rights have not been fairly applied should ____. Any student who is not able to resolve their grievance with the program may make a written, signed complaint to the Department of Mental Health, Division of Alcohol and Drug Abuse, P.O. Box 687, Jefferson City, MO 65102.

CONSENT TO RELEASE INFORMATION

I, ______________________________ , authorize ______________________________
(Name of Student) (Name of Program)

Initial Box

☐ TO RELEASE TO ______________________________
(Name of Court or Probation Office)

- Notice of program completion, including attendance and any violations of program rules.
- Notice of any assessment recommendations regarding further services.

The purpose of this disclosure is to provide information so that the court can make appropriate disposition of my alcohol or drug related offense.

Initial Box

☐ TO RELEASE TO THE MISSOURI DEPARTMENT OF REVENUE

- Notice of successful program completion.

The purpose of this disclosure is to provide information so that the Department of Revenue can make appropriate disposition of my drivers license suspension or revocation. I understand that I can revoke my consent to release information to the Department of Revenue except to the extent that the program has already acted on it.

This consent will expire on ______________________________ .
(Specify Date or Event)

______________________________ ______________________________
(Signature of Student) (Date)

PRE/POST TEST

Do not mark on test sheet. Please mark only on the answer sheet.

Section I. Please answer the following questions either true or false.

T F 1. Alcohol is a depressant or sedative.

T F 2. There is much more alcohol in a drink of whiskey than there is in a can of beer.

T F 3. Three of four drinks in an hour does not hurt driving ability for most people because the body uses up the alcohol very fast.

T F 4. Strong, black coffee, exercise, and cold showers are all helpful in sobering up a person before he drives.

T F 5. Alcohol is eliminated from the body primarily by the liver.

T F 6. Two people, one weighing 150 and the other 100 pounds, will have the same Blood Alcohol Concentration (BAC) if they drink the same amount in the same time.

T F 7. In Missouri, a driver is considered legally intoxicated if the amount of alcohol in his blood is one-tenth of one percent (.10%) or higher.

T F 8. Alcohol and other psychoactive substances have little effect on each other when taken together.

T F 9. Young people who have a parent who is chemically dependent are less likely to become dependent themselves, because they know first-hand the problems involved.

T F 10. Alcoholism is recognized as a disease by medical and health organizations.

T F 11. It is impossible to become alcoholic if one drinks only beer.

T F 12. Being able to "hold" or "handle" your liquor is a sign of tolerance.

T F 13. Alcohol is the most commonly abused drug in America.

T F 14. To be chemically dependent or alcoholic, one has to have abused alcohol/drugs for years.

T F 15. Fetal Alcohol Syndrome (FAS) and alcohol-related birth defects only occur when the mothers drink large amounts on a regular basis during the pregnancy.

T F 16. A predisposition to alcoholism can be inherited.

T F 17. In general, a person who has been successfully treated for alcoholism can drink moderate amounts of alcohol without any problem.

T F 18. Membership in Alcoholics Anonymous is limited to males over the age of 20.

T F 19. There is only one type of alcoholic or form of alcoholism.

T F 20. Drinking alcohol or using other drugs can improve sexual ability.

Section II. Please answer the following questions with either A, B, C, or D.

21. What temporary visual condition can occur from drinking alcohol?

A. Reduced side vision
B. Blurring
C. Seeing double
D. all of the above

22. Alcohol is a factor in approximately what percentage of fatal automobile accidents?

A. 20%
B. 35%
C. 50%
D. 65%

23. Which part of the driving task is made worse by four or more drinks?

A. Seeing the situation
B. Deciding what to do
C. Taking action
D. All of the above

24. As you drink more alcohol, your ability to drive:

A. Steadily improves
B. Improves at first, but then gets worse\
C. Worsens at first but then gets better
D. Steadily worsens

25. Which of the following terms describe alcoholism as a disease:

A. Primary
B. Progressive
C. Chronic
D. All of the above

26. Evidence that alcoholism may be inherited comes from:

A. Studies of adopted children
B. Brain wave patterns
C. MAO in blood cells
D. All of the above

27. 80 proof whiskey is what percent alcohol:

A. 20
B. 40
C. 80
D. None of the above

28. Fetal Alcohol Syndrome (FAS) symptoms are:

A. Temporary
B. Permanent
C. Cured by medicine
D. None of the above

29. The most dangerous drug combination is:

A. LSD and marijuana
B. Speed and marijuana
C. Alcohol and downers
D. PCP and speed

30. How does the separation and divorce rate in alcoholic families compare with others?

A. About the same
B. Two times as high
C. Five times as high
D. Seven times as high

31. Blood Alcohol Concentration (BAC) is determined by:

A. Amount drank, body weight, and time
B. Amount drank, sex, and time
C. Type of alcohol drank, body weight, and time
D. Type of alcohol drank, sex, and body weight

32. If a BAC of 0.10% is proof of intoxication, impairment begins at:

A. .09%
B. .07%
C. .05%
D. .03%

33. A woman who drinks during pregnancy:

A. Always gains too much weight\
B. Will become an alcoholic
C. Will have an alcoholic baby
D. Runs the risk of having a baby with Fetal Alcohol Syndrome

34. An alcohol-related traffic death in the United States occurs every:

A. 59 minutes
B. 37 minutes
C. 19 minutes
D. 9 minutes

ANSWER SHEET

Name ______________________________ Date ________________

Pre-Test or Post-Test
(Circle One)

1. T F
2. T F
3. T F
4. T F
5. T F
6. T F
7. T F
8. T F
9. T F
10. T F
11. T F
12. T F
13. T F
14. T F
15. T F
16. T F
17. T F
18. T F
19. T F
20. T F
21. A B C D
22. A B C D
23. A B C D
24. A B C D
25. A B C D
26. A B C D
27. A B C D
28. A B C D
29. A B C D
30. A B C D
31. A B C D
32. A B C D
33. A B C D
34. A B C D

PRE/POST TEST SCORING GUIDE

(For Instructor Use Only)

1. T
2. F
3. F
4. F
5. T
6. F
7. T
8. F
9. F
10. T
11. F

12 T

13 T

14. F
15. F
16. T
17. F

18 F

19. F
20. F
21. D
22. C
23. D
24. D
25. D
26. D
27. B
28. B
29. C
30. D
31. A
32. D
33. D
34. C

MAST

______________________ (Name)

______________________ (Date)

(Yes)	(No)		
______	______	1.	Do you enjoy a drink now and then?
______	______	2.	Do you feel you are a normal drinker? (By normal, we mean do you drink less than or as much as most other people.)
______	______	3.	Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening before?
______	______	4.	Does your spouse, parents, or other near relatives every worry or complain about your drinking?
______	______	5.	Can you stop drinking without a struggle after one or two drinks?
______	______	6.	Do you ever feel guilty about your drinking?
______	______	7.	Do friends or relatives think you are a normal drinker?
______	______	8.	Are you always able to stop drinking when you want to?
______	______	9.	Have you ever attended a meeting of Alcoholics Anonymous (AA) for yourself?
______	______	10.	Have you gotten into physical fights when drinking?
______	______	11.	Has drinking ever created problems between you, your spouse, or close family?
______	______	12.	Has your spouse (or other family member)ever gone to anyone for help about your drinking?
______	______	13.	Have you ever lost friends or girlfriends/boyfriends because of your drinking?
______	______	14.	Have you ever gotten into trouble at work or at school because of drinking?
______	______	15.	Have you ever lost a job because of drinking?
______	______	16.	Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking?
______	______	17.	Do you ever drink before noon fairly often?
______	______	18.	Have you ever been told you have liver trouble? Cirrhosis?
______	______	19.	Have you ever had delirium tremens (DTs), severe shaking, heard voices or seen things that weren't there after heavy drinking?
______	______	20.	Have you ever gone to anyone for help about your drinking?
______	______	21.	Have you ever been in a hospital because of drinking?
______	______	22.	Have you ever been a patient in a psychiatric hospital or on a psychiatric ward of a general hospital where drinking was part of the problem?
______	______	23.	Have you ever been seen at a psychiatric or mental health clinic, or gone to a doctor, social worker, or clergyman for help with an emotional problem in which drinking had played a part?
______	______	24.	Have you ever been arrested, even for a few hours, because of drunk behavior? (If yes, how many times? ______)
______	______	25.	Have you ever been arrested for drunk driving or driving after drinking? (If yes, how many times? ______)

MAST SCORESHEET - INSTRUCTOR USE ONLY

POINT VALUE			
(Yes)	(No)		
0	0	1.	Do you enjoy a drink now and then?
0	2	2.	Do you feel you are a normal drinker? (By normal, we mean do you drink less than or as much as most other people.)
2	0	3.	Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening before?
1	0	4.	Does your spouse, parents, or other near relatives every worry or complain about your drinking?
0	2	5.	Can you stop drinking without a struggle after one or two drinks?
1	0	6.	Do you ever feel guilty about your drinking?
0	2	7.	Do friends or relatives think you are a normal drinker?
0	2	8.	Are you always able to stop drinking when you want to?
5	0	9.	Have you ever attended a meeting of Alcoholics Anonymous (AA) for yourself?
1	0	10.	Have you gotten into physical fights when drinking?
2	0	11.	Has drinking ever created problems between you, your spouse, or close family?
2	0	12.	Has your spouse (or other family member)ever gone to anyone for help about your drinking?
2	0	13.	Have you ever lost friends or girlfriends/boyfriends because of your drinking?
2	0	14.	Have you ever gotten into trouble at work or at school because of drinking?
2	0	15.	Have you ever lost a job because of drinking?
2	0	16.	Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking?
1	0	17.	Do you ever drink before noon fairly often?
2	0	18.	Have you ever been told you have liver trouble? Cirrhosis?
5	0	19.	Have you ever had delirium tremens (DTs), severe shaking, heard voices or seen things that weren't there after heavy drinking?
5	0	20.	Have you ever gone to anyone for help about your drinking?
5	0	21.	Have you ever been in a hospital because of drinking?
2	0	22.	Have you ever been a patient in a psychiatric hospital or on a psychiatric ward of a general hospital where drinking was part of the problem?
2	0	23.	Have you ever been seen at a psychiatric or mental health clinic, or gone to a doctor, social worker, or clergyman for help with an emotional problem in which drinking had played a part?
*	0	24.	Have you ever been arrested, even for a few hours, because of drunk behavior? (If yes, how many times? ______)
*	0	25.	Have you ever been arrested for drunk driving or driving after drinking? (If yes, how many times? ______)

* 2 points each arrest

Tally point values as marked by the student. A total score of 4 points is suggestive of alcoholism. In general, 5 points or more would place the student in an "alcoholic" category. As a screening test, the MAST is sensitive at its lower levels.

MFQ

Instructions. Every question can be answered either true (T) or false (F). Mark an "X" on the answer sheet to indicate your answer. If you need help, raise your hand or call the instructor before you begin.

1. I am separated or divorced.
2. I live alone or with a friend.
3. My wife (husband) and I have seriously considered divorce in the last two years.
4. My wife (husband) often threatens me with divorce.
5. Would you say that your health is less than good?
6. Are you employed now?
7. Do you smoke?
8. Do you smoke less than 4 packs of cigarettes per week?
9. Were you ever arrested for Drunk and Disorderly Conduct?
10. Are your relatives upset with the way you live?
11. Is your income enough for your basic needs?
12. Are you bothered by nervousness (irritable, fidgety or tense)?
13. My judgement is better than it ever was.
14. Have you recently undergone a great stress (such as something concerning your job, your health, your finances, your family, or a loved one)?
15. I am apt to take disappointments so badly that I cannot put them out of my head.
16. I have long periods of such great restlessness that I cannot sit long in a chair.
17. Are you often sad or down in the dumps?
18. I have had periods in which I carried on activities without knowing later what I had been doing.
19. Do you have a lot of worries?
20. I have trouble sleeping.
21. I am average in all my habits.
22. Do you feel that you have bigger problems than other people?
23. I have lived the right (o.k. with you) kind of life.
24. My home life is as happy as it should be.
25. Does drinking help you make friends?
26. Much of the time I feel as if I have done something wrong or evil.
27. Do you think that bill collectors are much too quick to bother you for payments?
28. I wish I could be as happy as others seem to be.
29. I sometimes feel that I am about to go to pieces.

30. Do you usually sweat at night?
31. I often feel uncomfortable and down in the dumps.
32. It has been more than 2 years since my last out-of-town vacation.
33. I am a high-strung person.
34. I am satisfied with the way I live.
35. Have you ever had your driver's license suspended or revoked?
36. Have you asked for help with your problems (personal, family, marriage, money, or emotional) within the last 2 years?
37. Is there a history of alcoholism in your family?
38. Do you have a relative who is an excessive drinker?
39. Are you often depressed and moody?
40. I often feel as if I were not myself.
41. I am often afraid I will not be able to sleep.
42. Do you often feel afraid to face the future?
43. Drinking seems to ease personal problems.
44. I can handle 3 or more drinks and still drive well.
45. In the last year, I have drunk more than I can handle, but I can still be a good driver when I get behind the wheel.
46. I wish people would stop telling me how to live my life.
47. I often am afraid without knowing why I am afraid.
48. At times I think I am no good at all.
49. Do you feel bad about the things you do?
50. A drink or two gives me energy to get started.
51. Does drinking help you work better?
52. Do you ever find that you drink more than you had intended to drink?
53. I often have feelings of restlessness.
54. My friends are much happier than I am.
55. I often feel sorry for myself.
56. Would you say that 4 or 5 drinks affect your driving?
57. I feel nervous and upset most of the time.
58. Are you often bored and restless?

MFQ ANSWERSHEET

Name________________________________ Date ________________

1. T F
2. T F
3. T F
4. T F
5. T F
6. T F
7. T F
8. T F
9. T F
10. T F
11. T F
12. T F
13. T F
14. T F
15. T F
16. T F
17. T F
18. T F
19. T F
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26. T F
27. T F
28. T F
29. T F
30. T F
31. T F
32. T F
33. T F
34. T F
35. T F
36. T F
37. T F
38. T F
39. T F
40. T F
41. T F
42. T F
43. T F
44. T F
45. T F
46. T F
47. T F
48. T F
49. T F
50. T F
51. T F
52. T F
53. T F
54. T F
55. T F
56. T F
57. T F
58. T F

MFQ KEY - INSTRUCTOR USE ONLY

1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.	T	(+2)
10.	T	(-1)
11.		
12.	T	(+2)
13.		
14.		
15.		
16.	T	(-1)
17.	T	(-1)
18.	T	(-1)
19.		
20.	T	(+2)
21.	F	(+2)
22.	T	(-1)
23.		
24.	F	(+2)
25.	T	(+2)
26.	T	(+2)
27.		
28.		
29.	T	(-1)
30.	T	(-1)
31.	T	(-1)
32.	T	(+2)
33.	T	(+2)
34.	F	(+2)
35.	T	(+2)
36.	T	(+2)
37.	T	(+2)
38.	T	(+2)
39.		
40.	T	(-1)
41.	T	(-1)
42.	T	(-1)
43.	T	(+2)
44.	T	(+2)
45.	T	(+2)
46.		
47.		
48.	T	(-1)
49.	T	(+2)
50.		
51.		
52.		
53.		
54.		
55.		
56.		
57.		
58.		

MFQ SCORING GUIDELINES

The key is weighted, in that some responses are not counted and some have differing values, both positive and negative.

For answers that appear matching the key, score the points indicated. Add the positive points (+2) to yield an alcohol usage score. Add the negative points (-1) to indicate an emotionality score. Combine the alcohol score and the emotionality scores together, ignoring (+) and (-) signs.

39 or less - social drinkers

40-50 - suggestive of problem drinker

51 or more - problem drinkers

TWENTY QUESTIONS

______________________ (Name)

______________________ (Date)

(Yes)	(No)	
______	______	1. Do you lose time from work due to drinking?
______	______	2. Is drinking making your home life unhappy?
______	______	3. Do you drink because you are shy with other people?
______	______	4. Is drinking affecting your reputation?
______	______	5. Have you ever felt remorse after drinking?
______	______	6. Have you gotten into financial difficulties as a result of drinking?
______	______	7. Do you turn to lower companions and an inferior environment when drinking?
______	______	8. Does your drinking make you careless of your family's welfare?
______	______	9. Has your ambition decreased since drinking?
______	______	10. Do you crave a drink at a definite time daily?
______	______	11. Do you want a drink the next morning?
______	______	12. Does drinking cause you to have difficulty in sleeping?
______	______	13. Has your efficiency decreased since drinking?
______	______	14. Is drinking jeopardizing your job or business?
______	______	15. Do you drink to escape from worries or trouble?
______	______	16. Do you drink alone?
______	______	17. Have you ever had a complete loss of memory as a result of drinking?
______	______	18. Has your physician ever treated you for drinking?
______	______	19. Do you drink to build up your self-confidence?
______	______	20. Have you ever been to a hospital or institution on account of drinking?

TWENTY QUESTIONS SCORESHEET

This questionnaire was developed by John Hopkins University.

A YES answer to any one of the questions is an indicator of a possible alcohol problem.

A YES answer to any two questions is a probable indicator of alcoholism.

A YES answer to three or more questions is a definite indicator of alcoholism.

STUDENT SURVEY - ARTOP

Student Name ______________________________ Date ______________________

Please answer all of the following questions about your experiences with alcohol and other drugs. Read each question carefully and give the answer that is accurate for you. The questionnaire will be reviewed only by the staff of the Alcohol or Drug-Related Traffic Offenders' Program.

1. What is your current age? _____

2. At what age did you first use the following substances? If you have never used one of the substances, write "never" in the appropriate space.

Substance	Age
Alcohol	__________
Marijuana	__________
Cocaine or other stimulants	__________
LSD or other psychedelics	__________
Sedatives or tranquilizers (other than as prescribed or in the amount prescribed)	__________
Heroin or other narcotics	__________

3. On approximately how many occasions have you had alcohol to drink . . . (Complete each line below.)

A. . . . during the last 12 months? __________
B. . . . during the last 6 months? __________
C. . . . during the last 30 days? __________

4. When you drank alcohol during the last 12 months, did you drink . . . (Complete each line below.)

	Never or Rarely	Sometimes	Usually
A. . . . only for a glow.	_____	_____	_____
B. . . . until mildly intoxicated.	_____	_____	_____
C. . . . until intoxicated.	_____	_____	_____
D. . . . until passed out.	_____	_____	_____

5. How many times (if any) have you tried to . . . (Complete each line below.)

A. . . . cut back on your drinking? _____ times When was the last time? ________
B. . . . stop your drinking? _____ times When was the last time? ________
C. If you have ever stopped drinking, what was the longest period? ____________
When was this longest period? ______________________________

6. On how many occasions (if any) have you used marijuana or hashish . . . (Complete each line below.)

A. . . . during the last 12 months? __________
B. . . . during the last 6 months? __________
C. . . . during the last 30 days? __________

7. During the last year, has there been a period of a month or longer when you used marijuana on a daily basis? Yes _____ No _____

If "yes," when was this period? ____
If "yes," how much did you typically use each day? ______________________

8. On how many occasions (if any) have you used substances other than alcohol or marijuana . . . (Complete each line below.)

A. . . . during the last 12 months? __________
B. . . . during the last 6 months? __________
C. . . . during the last 30 days? __________

9. On how many occasions (if any) have you taken two or more substances at the same time. . . (Complete each line below.)

A. . . . during the last 12 months? __________
B. . . . during the last 6 months? __________
C. . . . during the last 30 days? __________

10. At what age did you first have the following difficulties associated with alcohol or drug use? (If you have never had the difficulty, write "never" in the appropriate space.)

	Age
Legal	__________
School/Work	__________
Family/Social	__________
Physical/Health	__________

11. During the last year, have you had any of the following difficulties associated with alcohol or drug use?

	Yes	No
Legal (other than DWI or BAC)	_____	_____
School/Work	_____	_____
Family/Social	_____	_____
Physical/Health	_____	_____

12. During the last year, how many times (if any) have you been issued a ticket or stopped and warned for a traffic violation (such as speeding, running a stop light or sign, careless and imprudent driving, etc.)? ________ times

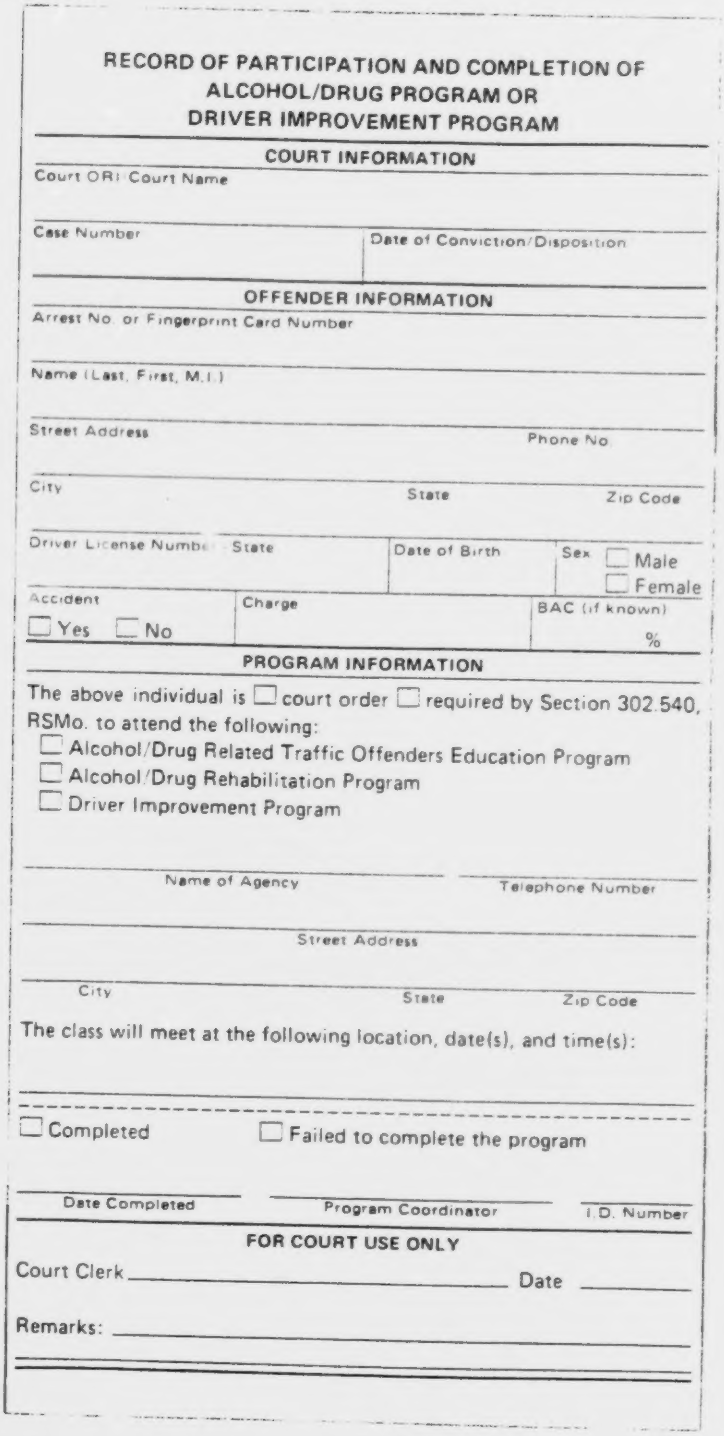
How many of these times had you been using alcohol or drugs? ________ times

13. Have you ever sought help for a problem associated with alcohol or drug use?

    Yes _____ No _____ If "yes," when? _____

14. Have either of your parents sought help for a problem associated with alcohol or drug use? Yes _____ No _____

15. Have either of your parents divorced, threatened divorce, or separated due to drinking by one of them? Yes _____ No _____



RECORD OF PARTICIPATION AND COMPLETION OF ALCOHOL/DRUG PROGRAM OR DRIVER IMPROVEMENT PROGRAM

COURT INFORMATION

Court ORI Court Name

Case Number

Date of Conviction/Disposition

OFFENDER INFORMATION

Arrest No. or Fingerprint Card Number

Name (Last, First, M.I.)

Street Address

Phone No

City

State

Zip Code

Driver License Number State

Date of Birth

Sex ☐ Male ☐ Female

Accident ☐ Yes ☐ No

Charge

BAC (if known) %

PROGRAM INFORMATION

The above individual is ☐ court order ☐ required by Section 302.540, RSMo. to attend the following:

- ☐ Alcohol/Drug Related Traffic Offenders Education Program
- ☐ Alcohol/Drug Rehabilitation Program
- ☐ Driver Improvement Program

Name of Agency

Telephone Number

Street Address

City

State

Zip Code

The class will meet at the following location, date(s), and time(s):

☐ Completed ☐ Failed to complete the program

Date Completed

Program Coordinator

I.D. Number

FOR COURT USE ONLY

Court Clerk ____________________ Date ________

Remarks: ____________________

This form is available in a four-page NCR format and can be purchased from the Missouri Department of Health at a bulk printing rate. An ARTOP may instead make its own local printing arrangements and include program specific information on the form. When the Department of Revenue needs to be notified, the copy should be sent to: Department of Revenue, P.O. Box 200, Jefferson City, Missouri 65102.

NOTICE OF ASSESSMENT RECOMMENDATION
ALCOHOL AND DRUG OFFENDER EDUCATION PROGRAMS

Name of Student ______________________________
(Last) (First) (M.I.)

Name of Program ______________________________

Assessment Recommendation

☐ No further services ☐ Residential services ☐ Outpatient services

☐ Self-Help groups ☐ Other (Specify) ______________

Comments: ______________________________

Reason for recommendation: ______________________________

Signature of Qualified Professional ______________ Date ______________

STUDENT ACKNOWLEDGEMENT

I have been informed of the assessment recommendation and have received a list of area resources, if further services were recommended. I understand that I can successfully complete the program without receiving further services. I understand that I am not obligated to utilize any particular service provider. My signature indicates only that I have been informed of the assessment recommendations.

Signature of Student ______________ Date ______________

••

INSTRUCTIONS FOR PROGRAM

(1) Original for program records
(2) Copy 2 is provided to the student
(3) Copy 3 is provided to the parent/guardian, if applicable
(4) Copy 4 is forwarded to the court

This form is available in a four-page NCR format and can be purchased from Missouri Department of Mental Health at a bulk printing rate. An ARTOP may instead make its own local printing arrangements.

PERSONAL PLAN TO PREVENT DRIVING WHILE IMPAIRED

Name ______________________________ Date ____________________

1. I plan to take the following steps to keep myself from driving while impaired in the future.

2. How do you know your plan will work?

3. Mark the following statement that best describes your attitude toward drinking and driving after attending the ARTOP program.

   A. My attitude is the same.
   B. My attitude has changed some.
   C. My attitude has changed drastically.

   Explain your answer.

4. If you received a recommendation for treatment services during the course of this program, what do you plan to do about the recommendation?

COURSE EVALUATION

NAME OF ARTOP ____________________ DATE ____________________

INSTRUCTOR(S) ____________________

Please help us to improve our program by completing this course evaluation. Place in each box the number which best describes your opinion: (1) Excellent, (2) Good, (3) Fair, (4) Poor

Additional comments are also appreciated.

Instructor

☐ Exercised appropriate class control
☐ Related with class
☐ Knowledge of subject
☐ Responded to class needs

Comments: ____________________

Course Curriculum

☐ Drinking and Driving
☐ Information about Alcohol
☐ Alcohol Abuse and Dependency
☐ Effects on the Family

Comments: ____________________

Films

☐ Quality
☐ Appropriateness
☐ Number (1-right amount, 2-too few, 3-too many)

Comments: ____________________

Assessment and Referral (if applicable)

☐ The counselor listened to me.
☐ The counselor was skilled and knowledgeable.
☐ The counselor understood me.

Comments: ____________________

Guest Speakers (if applicable)

☐ Appropriate topic
☐ Speaker's ability

Comments: ____________________

Facilities

☐ Parking
☐ Comfortable, suitable facility

Comments: ____________________

Suggestions for Improvement

____

Signed (optional) ____________________

ASSESSMENT NOTE

Name of Student: ______________________________

Date of Interview: ______________ Length of Interview: ______________

Source of Data (Check all that apply)

☐ Individual Interview
☐ Small Group Interview
☐ Screening Questionnaire
☐ Student Survey
☐ Motivations Worksheet
☐ Other (Specify) ______________
____
____

Result of Screening Questionnaire:

*Substance Use History (Type, Amount, Frequency, Changes in Use Pattern):

Effects of Substances in Life Areas:

- Legal
- School/Job
- Finances
- Family
- Social
- Physical
- Emotional

Summary of Findings:

Recommendation:

______________________________ ______________
(Signature of Qualified Professional) (Date)

*May refer to Student Survey, if one was completed

—APPENDIX II PROGRAM OPERATIONS

Disruptive Student
Incident Report
Small Group Interview Method
Individual Assessment Interview
Recommendation
Area Resources (Sample Format)
Confidentiality Provisions

DISRUPTIVE STUDENT

Appropriate interchange between instructor and students increases student involvement in the class and should be encouraged. However, if the interchange is not appropriate for whatever reason, it detracts from the educational process and should not be allowed.

Expectations concerning the conduct of students must be addressed early in the program and should include what actions the instructor must take and what the consequenses of those actions will be if anyone demonstrates inappropriate behavior, i.e. becomes argumentative, sleeps during class, uses any substances prior or during class, or returns late from break. Consequences could include: inform referral source, loss of registration fee, start course over, removal from class.

Instructors, sometimes in the hope of enlisting the support of certain class members, may allow those members special privileges or may allow the entire class too much latitude in the beginning, hoping to regain control sometime later in the program. These are almost always questionable tactics. If control over the entire class, or any segment of it, is lost, it becomes extremely difficult to regain control. It is far easier to "loosen-up" than it is to "tighten-up". Class members almost never respect anyone of whom they can take advantage.

Individual programs are encouraged to develop written policy and procedure for dealing with such contingencies as: class members who appear substance impaired either at the beginning of the program or after a break, class members who are argumentative or hostile, class members who sleep or talk during class or engage any other activity which detracts from the program. Written procedures are particularly important when several staff members are involved with the program.

If substance use can be confirmed or if there is some other flagarant violation of program rules, the ARTOP should dismiss the student and notify the court of non-completion. If the staff member is unable to clearly establish that a class member is substance impaired (i.e. no breath odor of alcohol and the staff member did not observe the individual engaging in substance use), a recommended approach would be for the suspected individual to be informed that his attitude and behavior, as indicated, is disruptive to the class. The student would then be instructed to leave, with the understanding that he must reschedule the class if he intends to complete the course. If substance use cannot be confirmed, it might be advisable to allow the student to re-enroll at a future date, paying only a nominal re-instatement or re-scheduling fee. A re-scheduling fee in the $5 to $10 range is considered reasonable. A re-scheduling fee may also be charged if a student does not show for a scheduled class, unless advance approval and arrangements have been made.

Class participants whose behavior is disruptive and who are not substance impaired should be offered the opportunity to bring their behavior in line with program expectations. If they refuse, then the offenders must be required to leave. The instructor's primary concerns are the educational benefits and the safety of the class, not one or more troublesome students. Those ejected should not receive credit for completing the course.

An incident report must be completed any time a student is removed from the class or anytime the safety of the class or instructor is compromised. (See the following for a sample Incident Report.) The report must be reviewed and countersigned by the program administrator. The administrator shall make the final disposition of the incident.

All incidents involving a disruptive student are challenging to staff. Should a disruptive student refuse to leave and if they pose a threat to the class or the program personnel, the instructor, with the safety his class and himself as the prime consideration, must follow the dictates of the situation, i.e. if the disruptive participant appears to be intent on hurting someone, the class should be dismissed and when possible, the authorities summoned. In any case the disruptive student should be made to know that his behavior will be reported to the courts, to the probation officer or to whomever is concerned.

Impaired participants who are allowed to remain will very quickly erode the program's reputation and its effectiveness. The other class participants will probably be aware of any substance use and will base not only their future behavior but their opinion of the program on how well the ADEP follows its own guidelines.

One substance impaired class participant not adequately and promptly dealt with will, in all probability, be reflected in the subsequent attitude and behavior of other class members. However, the reverse is also true, impaired students or family members expediently and effectively handled will help build the program's reputation and make classes easier to manage.

INCIDENT REPORT

(Program)

(Date of Incident)

(Student)

(Staff Involved)

Description of the Behavior or Incident:

Action Taken:

(Signature of Staff Member) (Date)

****

TO BE COMPLETED BY PROGRAM ADMINISTRATOR

Additional Information:

Final Disposition:

(Signature of Administrator) (Date)

SMALL GROUP INTERVIEW METHOD

The small group interview can be a valuable tool in determining the extent of an individual's involvement with alcohol or drugs. It can be one method of conducting an individualized assessment as required by 9 CSR 30-3.760(9B).

Interviews are most effective when the qualified counselor-to-student ratio is no more than one to six. The length of the small group interview will vary depending on the number of students. The interview should be done in the middle stages of ARTOP. If the ARTOP consists of three sessions, a small group interview would be suited for the early part of the second session. It is acceptable if students take part in the group interview regardless of score on screening instruments. Inclusion of all students can lend balance to the group and may result in better class logistics, particularly if the class is small in number and the instuctor functions as the qualified professional.

Many times a person's natural defenses may hinder an accurate assessment. To best achieve an honest assessment of the impact of substance use on the student's life, a relaxed tone is desirable. In the small group, words such as "alcoholic" can be avoided to lessen the students' defenses. If necessary, the term "harmful involvement" may be used because it is less threatening.

The small group process may be facilitated by the group sitting in a circle, facing inward. If there is a chalkboard or flipchart, the qualified professional writes the major life areas on it. He may instead choose to distribute a list of the life areas to the students. The life areas should include: Legal; School/Job; Finances; Family; Social; Physical; Emotional/Self-Esteem; Sexual (Optional); and Spiritual (Optional).

The staff member tells the students that the goal of the interview is to determine how substance use may be affecting these life areas for each of us.

The qualified professional begins by introducing himself and telling as much about himself as is necessary to establish a feeling of honesty and sharing. (The staff member may or may not make reference to his own drinking or drug history, whether or not he is recovering, or other information pertinent to the process.) He should then ask if someone in the group would voluntarily begin the process. Often someone wants to go first, but if no one offers, the staff member chooses someone. That person then begins by stating how much he uses (or did use prior to the time when he received the citation) and how that use has affected all of the seven life areas.

Sample questions for small group process can include:

1. Legal: Name all legal difficulties associated with substance use, e.g. alcohol or drug related traffic offenses, speeding, stealing, fighting, drunk and disorderly.

2. School/Job: Has the use of substances ever caused you difficulty either at school or on the job, e.g. reduced performance, caused absenteeism, confronted by supervisor/school authorities?

3. Finances: Do you spend a disproportionate amount of your money on alcohol or other drugs? Have you stolen in order to purchase substances?

4. Family: Does substance use cause friction between you and family members? Does your drinking or drug use cause problems between other family members, i.e. parents, wife, in-laws? `Have you been kicked out of the house?

5. Social: Does your use of alcohol or drugs cause problems between you and friends? Have you started "running" with a different crowd because the other one did not use as much as you wanted to? Do nearly all of your friends drink or use drugs frequently? Do you feel awkward in social situations unless you can use substances?

6. Physical: Have you suffered from physical problems related to alcohol or drugs (other than hangover), e.g. disruption of sleep or eating patterns, blackouts, injuries?

7. Emotional/Self-esteem: Do you think less of yourself because you drink or do drugs? Do you think you are a better or more confident person because of your substance use? Have you done things which you find embarassing or shame producing while drinking or using? Have you been discouraged to the point of considering suicide?

(Optional) Sexual: Have your decisions about partners, time, place or activity ever been affected by drinking or using? Has sexual performance ever been compromised by alcohol or drug use (inability to achieve or maintain erection for men, failure to lubricate for women)?

(Optional) Spiritual: Has the use of alcohol or other substances interfered with how you view the universe and your place in it? Do you feel more alienated or divided from others as a result of drinking and using?

Some interviewers prefer to rely on memory, writing down as much as they are able immediately after the interview. They feel that the presence of the note pad tends to inhibit openness. Others prefer to take notes during this part of the process, realizing that they may not be able to remember all they should. They attempt to overcome any student apprehension about the note taking by making comments, such as—"There will be more said in the group than I can remember and I will need to take notes", "I don't want to lose or forget any important information", "You are welcome to look at my notes", or "No notes will be given to parents, the court, or anyone else". The size of the group may also influence the decision to take or not to take notes.

After each student in the group has gone through all of the life areas and described how the use of alcohol or drugs has affected each one, the counselor, in private, should make an assessment based on the interview and other questionnaires and worksheets. The counselor needs to determine to what extent, if any, the student is harmfully involved with substances. Based on this assessment, an appropriate recommendation for services needs to be developed, where indicated.

Small group interview sessions can best be facilitated when each group has a certain amount of privacy. If the ARTOP class has more than six students, the interviews may need to be accomplished at different times. However, if there are other qualified professionals present, then small group interviews can be accomplished simultaneously. A qualified professional must not have the responsibility for more than six students at one time. It might be possible for the same person to hold more than one small group interview during the same evening or day. This would require careful program planning and the assistance of another staff member or instructor.

Students who score in the problem range on the Screening Questionnaire need to have not only an assessment of how substance use is affecting life areas but also an assessment of substance use patterns. The substance use pattern may be discussed in the small group interview, or the patterns may be assessed by means of the Student Survey. (See Student Survey on page I-17 in Appendix I.)

INDIVIDUAL ASSESSMENT INTERVIEW

The logistics of an individual or "one-on-one" assessment interview can vary considerably and still be effective and adhere to the standards. The time taken for the interview cannot be counted as part of the ten hours of education which each student is required to receive.

Only the students who score in the problem area on the screening questionnaire must receive a more complete assessment interview. The instructor, based on his observations, may also require a student to receive an individualized assessment. The student is not required to pay any additional fee for the assessment, as it is built into the standard ARTOP fee.

While individual assessment interviews may be time and labor intensive, some programs may prefer them over the small group interview process. Both approaches have strengths and weaknesses. Whichever approach is used, it is preferable to conduct the assessment in the early to middle stages of the ARTOP process.

The individual interview should take place in a private setting. The appropriate length of time for the individual interview will vary depending on the style of the interviewer and whether the substance use history is taken during the interview itself or previously through a questionnaire. It does save time to have the history completed prior to the interview with the qualified professional then referencing it during the interview. (See Student Survey on page I-17 in Appendix I.)

The qualified professional determines if there is harmful involvement with alcohol or drugs in the following major life areas of the student: legal, job/school, finances, family, social, physical and emotional. (Optional - sexual, spiritual)

The qualified professional shall combine the information gathered from the interview with the results of the screening questionnaire and any other class worksheets or observations to reach a conclusion about whether or not the student presents substance abuse or dependency. The counselor shall develop an appropriate recommendation, e.g. no further services, outpatient treatment, residential treatment, or participation in a self-help group such as Alcoholics Anonymous or Narcotics Anonymous.

RECOMMENDATION

The student will have recommendations presented and explained to him. Ideally, this would be done near the close of the program. If the student is given a recommendation for further services at an earlier time, he may lose interest in the program, discount what is said, or even become disruptive.

The process of informing the student of their assessment and recommendation, again, can be accomplished in a variety of ways depending on number of personnel available, space, and number of students. A class of 20 students certainly will have more logistical problems than one of seven or eight.

It is possible to make recommendations to the class as a whole. The instructor or qualified professional could present each student with a written summary or explanation for the recommendation and offer to discuss matters further after class. Another method would be to take aside (to another room or to the hallway) all those with similar recommendations, leaving the others to work on an assignment, watch a film/video, etc. As the different groups receive their assessment recommendation, they would then be asked to develop their personal plan. (See page I-22 in Appendix I.)

Another method would be for each student to have an exit interview during which the assessment and any recommendation is discussed. This method may be the most desirable but presents more timing and logistical considerations, particularly with a larger class.

Each student who receives a recommendation for further services must be given a directory of all service providers in the area. The directory or listing must include the name of the program, type of service(s) provided, availability of a sliding fee scale, telephone number and address. The directory must include the where and when of local AA and NA, and may also include Alanon and Alateen meetings.

All students who receive a recommendation for further services sign off that they have been given a recommendation, have received a list of resources, and understand that they are not required to obtain any further services from the person or agency who provided the ARTOP. The Notice of Assessment Recommendation form clearly states that the student's signature means that he has received information, not that he necessarily agrees with the recommendation.

AREA RESOURCES

Residential Programs

Name:
Address:
Phone:
* Fees:

Name:
Address:
Phone:
Fees:

Outpatient Programs

Name:
Address:
Phone:
** Type Service:

Name:
Address:
Phone:
Type Service:

Self-Help Meetings***

Monday:

Tuesday:

Wednesday:

Thursday:

Friday:

Saturday:

Sunday:

* Fees: General information should be included, but exact charges do not need to be listed. General information could include such data as - "Based on ability to pay" or "Insurance coverage" or "Individual payment plans" as the case may be.

** Type of Service: This could include notations such as "by appointment", "intensive evening program", or other special characteristics of the program.

*** Self-Help Meetings: This listing must include Alcoholics Anonymous and Narcotics Anonymous meetings, as available. Each meeting should be identified as "open" or "closed". Alanon, Naranon, and Alateen meetings may be included.

This is a sample format for listing local referral resources. A statewide listing of certified treatment programs can be obtained from: Certification and Treatment Section, Division of Alcohol and Drug Abuse, P.O. Box 687, Jefferson City, MO 65102. The listing identifies both publicly funded and private programs.

CONFIDENTIALITY PROVISIONS

Confidentiality of records is required in the Certification Standards for Alcohol and Drug Offender Education Programs, and federal confidentiality regulations (42 CFR Part 2) are applicable. Confidentiality provisions and regulations are applicable because ARTOPs provide assessment and referral and because many of the organizations sponsoring ARTOPs receive direct or indirect federal assistance.

Students must give written consent before information can be released to any other party (42 CFR Part 2-2.2 and 2.14). A sample consent form is contained on page I-4 in Appendix I. The student must sign this form and initial the applicable box(es), when registering for the program or completing initial paperwork. The student's signed consent is necessary before sending any records to the court or Department of Revenue. When the ARTOP sends the Notice of Assessment Recommendation to the court, the notice should have a redisclosure statement stamped on it.

Consent to release information to the court cannot be revoked by the student once given. Consent can be revoked to the Department of Revenue, but this would be a highly unlikely occurrence because there would be no benefit to the student in doing so.

A student under the age of 21 with a DWI or BAC offense should attend ADEP rather than ARTOP, if one is available. Special confidentiality provisions apply to a student under the age of 18 with an alcohol offense. Section 431.061 RSMo 1986 requires parent consent to services for minors with a problem related to alcohol. The ARTOP cannot notify the court or Department of Revenue of either successful or unsuccessful completion without the written consent of both the minor and the parent, unless other special circumstances exist. Notification could be made if the initial court order for ARTOP included a provision for reporting completion of the program and any assessment rcommendation. Along with the order, the court should also issue a subpoena to the ARTOP. If the court has not specifically ordered reporting or disclosure, the program may apply to the court for a hearing to authorize release of client information. (42 CFR Part 2-2.64)

—APPENDIX III RESOURCE MATERIAL

Table - Economic Costs of Alcohol Abuse and Dependency
Table - Number of Deaths Attributable to Alcohol
Table - Intoxicated Drivers Killed in Motor Vehicle Crashes
Table - Alcohol Use Among Convicted Offenders
Graph - Motor Vehicle Deaths
Graph - Probability of Crash
BAC Charts
Drinking Myths
Effects of Marijuana on Driving Skills
Disease of Chemical Dependency (Vernon Johnson)
Family V-Chart
CAST (Children of Alcoholics Screening Test)
Roles of Children of Alcoholics
DSM III-R: Alcohol Dependence
DSM III-R: Substance Dependence and Abuse
Film Reviews
Film Resources

Table 1

Economic Costs to Society of Alcohol Abuse and Dependency, United States, 1983

Types of Costs	Costs ($Millions)
Core Costs	
Direct	
Treatment*	$13,457
Health Support Services	1,549
Indirect	
Mortality	18,151
Reduced Productivity	65,582
Lost Employment	5,323
Other Related Costs	
Direct	
Motor Vehicle Crashes	2,697
Crime	2,631
Social Welfare Administration	49
Other	3,673
Indirect	
Victims of Crime	194
Incarceration	2,979
Motor Vehicle Crashes	590
Total	$116,875

---

* For alcohol abuse and alcoholism, liver cirrhosis, other illnesses, motor vehicle crashes, and other injuries.

Table 2
Estimated Number of Deaths Attributable to Alcohol: United States, 1980

Cause of Death Alcohol	Number Of Deaths	Estimated Number Attributable To Alcohol	Percentage Attributable To
Alcohol as the main cause			
Alcoholic psychoses	454	454	100
Alcohol dependence syndrome	4,350	4,350	100
Nondependent use of alcohol	889	889	100
Alcoholic nerve damage	4	4	100
Alcoholic heart damage	650	650	100
Alcoholic gastritis	84	84	100
Alcoholic fatty liver	1,166	1,166	100
Acute alcoholic hepatitis	794	794	100
Alcoholic cirrhosis of the liver	9,166	9,166	100
Alcoholic liver damage unspecified	1,812	1,812	100
Accidental poisoning by alcohol	218	218	100
Subtotal		19,587	
Alcohol as a contributing cause			
Cancer of directly exposed tissues			
Malignant neoplasm of lip, oral cavity, pharynx	8,553	2,138	25
Malignant neoplasm of larynx	3,412	853	25
Malignant neoplasm of stomach	14,372	2,874	20
Malignant neoplasm of liver	5,618	1,404	25
Subtotal		7,269	
Other diseases			
Diabetes mellitus	35,649	1,782	5
Hypertensive diseases	32,633	1,632	5
Pneumonia and influenza	54,619	2,731	5
Diseases of esophagus, stomach, duodenum	8,734	873	10
Chronic liver disease and cirrhosis not specified as alcohol	18,645	4,661	25
Subtotal		11,679	
Accidents			
Railway accidents	632	63	10
Motor vehicle traffic accidents	51,930	25,965	50
Other road vehicle accidents	232	46	20
Water transport accidents	1,429	286	20
Air and space accidents	1,494	149	10
Accidental falls	13,294	3,324	25
Accidents caused by fire and flames	5,822	1,455	25
Accidents due to natural and environmental factors	3,194	799	25
Accidents caused by submersion, suffocation, and foreign bodies	10,216	3,576	35
Other accidents	8,744	2,186	25
Subtotal		37,849	

(Continued on Reverse)

Violence			
Suicide	26,869	8,061	30
Homicide	23,967	11,984	50
Undetermined whether accidental or purposely inflicted	3,663	1,099	30
Subtotal		21,144	
All causes		97,528	

Research indicates that alcohol abuse shortens lives according to the following categories and years: alcoholic gastritis, 17.8 years; alcoholic psychosis, 15.8 years; alcoholic heart damage, 15 years; alcoholic cirrhosis, 14.4 years; and alcoholic nerve damage, 5.8 years.

Table 3

Intoxicated Drivers (BAC 0.10 Percent or Higher) Killed In Motor Vehicle Crashes, United States, 1980-1984

Year	Total Number Of Fatally Injured Drivers	Number of Fatally Injured Drivers Who Were Intoxicated	Percentage of Fatally Injured Drivers Who Were Intoxicated
1980	28,816	14,408	50
1981	28,200	13,818	49
1982	24,690	11,851	48
1983	24,138	11,103	46
1984	25,582	11,000	43

Note: Projections are based on analysis of BACs of fatally injured drivers in 15 States that have consistently tested drivers killed in motor vehicle crashes from 1980 through 1984.

Data in table 3 are taken from only 15 States, those that have consistently tested blood alcohol in at least 80 to 90 percent of drivers killed in traffic accidents; the results are then projected to the Nation as a whole. The study considered traffic fatalities to be alcohol related if an involved driver (or pedistrian) had a measurable BAC or if the investigating officer judged that the driver (or fatally injured pedestrian) had been drinking. Although most States define legal intoxication as having a BAC of 0.10 percent or higher, alcohol may cause a deterioration of driving skills at 0.05 percent or even lower, and deterioration progresses rapidly with rising BAC.

Table 4

Alcohol Use Among Convicted Offenders Just Before Committing Current Offense, by Crime Type, United States, 1983

Current Offense	Number Convicted	% of Convicted Persons Who Used Alcohol
Total	132,620	48%
Violent	32,112	54
Murder/attempted murder	3,345	49
Manslaughter	1,188	68
Rape/sexual assault	4,017	52
Robbery	11,945	48
Assault	9,609	62
Other violent[a]	2,008	49
Property	51,660	40
Burglary	17,335	44
Auto theft	2,960	51
Fraud/forgery/embezzlement	5,976	22
Larceny	18,001	37
Stolen property	3,676	45
Other property[b]	3,712	51
Drugs	13,181	29
Traffic	5,469	26
Possession	6,830	30
Other Drugs	882	44
Public order	34,036	64
Weapons	2,769	32
Obstructing justice	6,856	43
Traffic	3,734	36
Driving while intoxicated[c]	13,406	93
Drunkenness/morals offenses[d]	4,894	70
Other public order[e]	2,377	28
Other[f]	1,008	40

[a] Includes kidnapping, purse snatching, hit-and-run driving, and child abuse.

[b] Includes arson, destruction of property, property damage from hit-and-run driving and trespass.

[c] Includes driving while intoxicated and driving under the influence of drugs.

[d] Also includes vagrancy and commercialized vice.

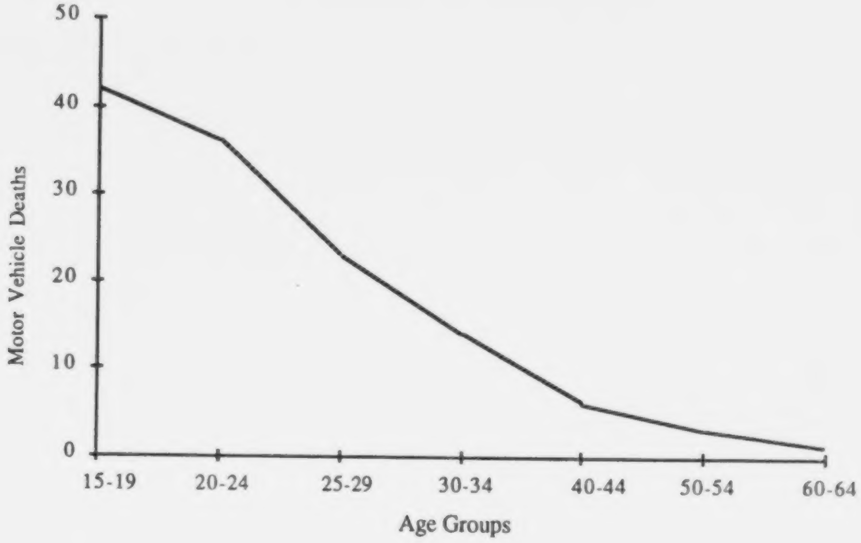
[e] Includes rioting, habitual offender, family-related offenses such as nonsupport or abandonment, invasion of privacy, and contributing to the delinquency of a minor.

[f] Includes juvenile offenses and unspecified offenses.

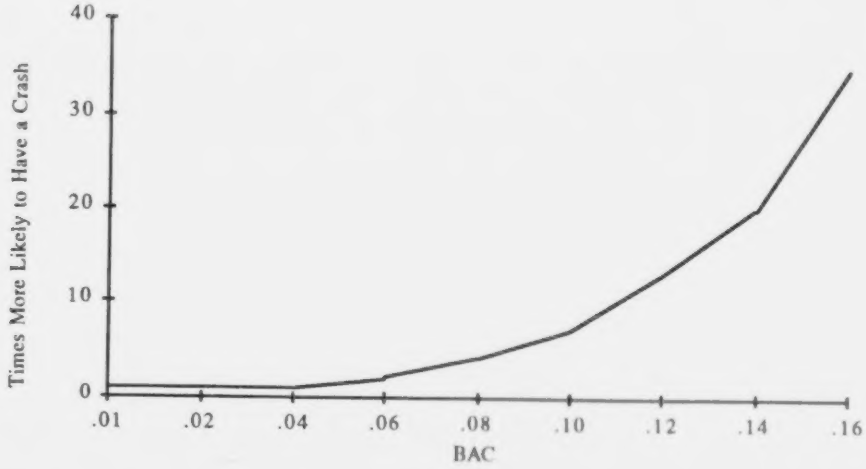
A comparison of alcohol involvement in relation to the type of crime committed showed that 64 percent of inmates convicted of public-order offenses had used alcohol just before the offense. Public-order offenses include driving while intoxicated, but even with this offense excluded, 45 percent of the remaining public-order offenders had used alcohol. Of offenders convicted of violent crimes, more than half (54 percent) had used alcohol just before the offense. Alcohol involvement was particularly prevalent in cases of manslaughter (68 percent) and assault (62 percent). There was somewhat less alcohol involvement in cases of property crime (40 percent), and drug offenses had the least alcohol involvement (29 percent). Even in the category of lowest alcohol involvement (fraud/forgery/embezzlement), 22 percent of convicted offenders reported alcohol use just before the offense.

Studies investigating the relationship between alcohol and homicide have shown that about half of offenders and victims were drinking at the time of the crime. One study found that 45 percent of homicide victims had been drinking and 33 percent were intoxicated with BACs of 0.10 percent or higher. Analysis of BACs in 4,000 homicide victims in Los Angeles gave very similar results, with 46 percent of victims having measurable BACs and 30 percent legally intoxicated.

MOTOR VEHICLE DEATHS AS A PERCENT OF ALL DEATHS FOR SELECTED AGE GROUPS



PROBABILITY OF A CRASH



BLOOD ALCOHOL CONCENTRATION (BAC) CHART

	1 Drink				2 Drinks				3 Drinks				4 Drinks			
After hours	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1
Weight pounds																
80	—	—	—	.02	—	—	.05	.06	.07	.10	.10	.10	.12	.12	.15	.15
100	—	—	—	.02	—	—	.04	.06	.05	.07	.08	.09	.09	.10	.12	.13
120	—	—	—	.02	—	—	.03	.04	.03	.04	.06	.08	.06	.08	.09	.11
140	—	—	—	.01	—	—	.02	.04	.02	.03	.05	.06	.04	.06	.08	.09
160	—	—	—	.01	—	—	.02	.03	.01	.02	.04	.05	.03	.04	.06	.08
180	—	—	—	.01	—	—	.01	.03	—	.02	.03	.04	.02	.04	.05	.07
200	—	—	—	—	—	—	.01	.02	—	.01	.03	.04	.01	.03	.04	.06

	5 Drinks				6 Drinks				7 Drinks				8 Drinks			
After hours	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1
Weight pounds																
80	.17	.17	.19	.20	.19	.22	.22	.25	.25	.27	.27	.30	.29	.30	.32	.33
100	.13	.14	.16	.17	.16	.18	.19	.21	.20	.22	.23	.25	.24	.25	.27	.28
120	.09	.11	.13	.14	.13	.14	.16	.17	.15	.17	.19	.20	.19	.20	.22	.23
140	.07	.09	.10	.12	.10	.12	.13	.15	.13	.14	.16	.17	.15	.17	.18	.20
160	.06	.07	.09	.10	.08	.09	.11	.13	.10	.12	.13	.15	.13	.14	.16	.17
180	.04	.06	.07	.09	.06	.08	.09	.11	.09	.10	.12	.13	.11	.12	.14	.15
200	.03	.04	.06	.08	.05	.07	.08	.09	.07	.09	.10	.12	.09	.10	.12	.13

This chart may be used to determine approximate BAC after a period of drinking.

CHART OF PHYSIOLOGICAL EFFECTS OF BLOOD ALCOHOL CONTENT
(approximate)

No. of alcoholic beverages	Blood alcohol level (%)	Effects
1	0.02-0.03	Slight elevation of mood; mild euphoria; sense of well-being; slight dizziness; some impairment of judgement and memory.
2	0.05-0.06	Sense of warmth; lowered alertness; mental relaxation; mild sedation; exaggerated behavior; loss of restraints; disruption of judgement; slowed reaction time; decrease in fine motor coordination.
3	0.08-0.09	Speech impairment; visual and hearing perception impaired; loss of some motor skills; equilibrium reduced; exaggerated emotion; talkativeness; noisiness.
4	0.11-0.12	Gross motor coordination affected; clumsiness; greatly impaired ability to drive a car; drowsiness; unsteadiness; depression of sensory functioning; mental faculties impaired.
5	0.14-0.15	Major physical and mental impairment; severe impairment of perception and judgement; unsteadiness and staggering; difficulty in talking.
7	0.20	Marked depression of sensory and motor capabilities; difficulty in maintaining standing position; visual distortions; poor judgement; confusion; high driving risk.
10	0.30	Severe motor disturbances; poor comprehension; uninhibited behavior; stupor condition; may vomit; involved in accidents frequently.
14	0.40	Almost complete loss of feeling and perception; may be unconscious, in a stupor, or coma.
17	0.50	Coma.
20	0.60	Death due to cardiac and respiratory failure.

DRINKING MYTHS

The following is a modern mythology of drinking, dedicated to the idea that what we think we know can hurt us.

Myth: Most alcoholics are skid row bums.
Only 3% to 5% are on skid row. Alcoholics are representative of a cross-section of Americans.

Myth: Most skid row bums are alcoholics.
No, less than half of those living on skid row have drinking problems.

Myth: Very few women become alcoholic.
In the 1950's, there were five or six known alcoholic men to every known alcoholic woman. Now the ratio is about three to one. This may be due to better reporting.

Myth: Most alcoholic people are middle-aged or older.
A University of California research team has found that the highest proportion of drinking problems is among men in their early 20's. The second-highest incidence occurs among men in their 40's and 50's.

Myth: You're not alcoholic unless you drink a pint a day.
There's no simple rule of thumb. Experts have concluded that how much one drinks may be far less important than when, how, and why one drinks.

Myth: The "drunk tank" is a good cure for alcoholism.
Alcoholism is an illness, and can be treated successfully. We don't jail people for other illnesses; why for alcoholism?

Myth: "I don't know any alcoholics."
Maybe you don't know you know any alcoholics. Some of your best friends may have drinking problems. They don't seem "different". And they usually try to hide their illness, even from themselves. About one of every ten executives has a drinking problem.

Myth: The really serious problem in our society is drug abuse.
That's true, but our number one drug problem is alcohol abuse. Alcohol is a drug. About 300,000 Americans are addicted to heroin, but about 10,000,000 are addicted to alcohol. It's not even close.

Myth: People get drunk ... or sick ... from switching drinks.
That shouldn't really make much difference. What usually causes an adverse reaction to alcohol is how much a person drinks ... and when and why.

Myth: "It's only beer."
Sure, just like it's only bourbon, or vodka, or gin. One beer or one glass of wine is about equal in alcohol content to one average highball. The effect might be a little slower, but you'll get just as drunk on beer or wine as on hard liquor.

Myth: Some people can really "hold their liquor".
Often, the person who can hold so much is developing a tolerance for alcohol. Tolerance is one of the first signs of alcoholism.

Myth: "I drive better after a few drinks."
In most states, the legal definition of "driving under the influence" is a blood alcohol concentration (BAC) of 0.10%. But scientific tests have proven that even professional drivers' abilities diminish sharply at levels as low as 0.03% ... just a few drinks. At those levels, judgement is affected. So people think they're driving better while they're really driving worse.

Myth: Alcohol is a stimulant.

It's about as good a stimulant as ether. Alcohol may cause temporary psychological excitement. However, alcohol acts as a depressant on the central nervous system.

Myth: "What a man—still on his feet after a whole fifth."

When we stop thinking it is manly to drink too much, we have begun to grow up. It's no more manly to over-drink than it is to over-eat.

Myth: Drinking is a sexual stimulant.

Contrary to popular belief, the more you drink, the less your sexual capacity. Alcohol may stimulate interest in sex, but it interferes with the ability to perform.

Myth: Getting drunk is funny.

Maybe it is in old Charlie Chaplin movies ... but not in real life. Drunkenness is no funnier than any other illness or incapacity.

Myth: "I'm just a social drinker."

Just because you never drink alone doesn't mean you can't have a drinking problem. Plenty of "social drinkers" become alcoholic.

Myth: A good host never lets a guest's glass get empty.

There's nothing hospitable about pushing alcohol or any other drug. A good host doesn't want his guests to get drunk or sick. He wants them to have a good time ... and remember it the next day.

Myth: People are friendlier when they are drunk.

Maybe. But they are also more hostile, more dangerous, more criminal, more homicidal, and more suicidal. One-half of all murders and one-third of all suicides are alcohol-related.

Myth: "Give him black coffee. That will sober him up."

Sure, in about five hours. Cold showers don't work either. Only time can get the alcohol out of the system, as the liver metabolizes the alcohol. There's no way to hurry it.

Myth: The best cure for a hangover is ...

Everybody has his favorite. But they all have one thing in common—they don't work. What works?—preventive medicine. If you don't drink too much, you won't get a hangover.

Myth: Today's kids don't drink.

The generation gap is greatly exaggerated. The kids' favorite drug is the same as their parents' favorite—alcohol. And drinking problems are rising among the young.

Myth: If the parents don't drink, the children won't drink.

Sometimes that's true. But the highest incidence of alcoholism occurs among offspring of parents who are either teetotalers ... or alcoholic. Perhaps the extremes of attitudes of the parents is an important factor.

Myth: The time to teach kids about drinking is when they reach legal age.

By that time, they've long since learned what we can teach them. We teach kids from birth, and they learn more from what they see us do than from what they hear us tell them.

Myth: "Thank God my kid isn't on drugs!"

If he's hooked on drinking, he's on drugs. With ten million Americans dependent on alcohol, it's time we stopped pretending it isn't a drug.

Myth: It's rude to refuse a drink.

What's rude is trying to push a drink on someone who doesn't want it ... or shouldn't have it.

Myth: It's impolite to tell a friend he's drinking too much.

Maybe if we weren't all so "polite," we wouldn't have so many friends with drinking problems.

Myth: Alcoholism is just a state of mind.
It's more than that—it's a very real illness. There is scientific evidence that physiological dependence is involved.

Myth: The first round should be a "double" to break the ice.
Breaking the ice is a job for a good host and hostess ... not for a bottle. You must have more to give your guests than just alcohol.

Myth: Mixing your drinks causes hangovers.
The major cause of hangovers is drinking too much.

Myth: Indians can't drink; Jews don't drink.
Some can and some can't; some do and some don't.

Myth: People who drink too much hurt only themselves.
They hurt themselves, their families, their friends, their employers, strangers on the highway, and you.

Myth: Your kids will learn what you tell them about drinking.
Your kids will learn what you show them about drinking. If you drink heavily, if you get drunk, the chances are that your kids will follow your example.

Myth: Never trust a person who never takes a drink.
You know that's silly. Yet many people are a little nervous around a person who doesn't drink.

EFFECTS OF MARIJUANA ON DRIVING SKILLS

Marijuana impairs driving skills. This conclusion comes from studies using test course performance, driving simulators, and actual street driver performance. These studies consistently show that stoned drivers react slower and make more accident-causing mistakes. Studies from Massachusetts and California indicate that the driver in approximately 15% of fatal accidents was stoned. Tests with experienced pilots who received less than one joint demonstrated on a flying simulator that they made six times as many minor mistakes and seven times as many major ones, compared to when they took the test straight.

How does marijuana cause such impairment? By impairing thinking, judgement, reaction time, and psychomotor coordination. Thinking and reflexes are slowed, making it hard for drivers to respond to sudden, unexpected events. Judgement is affected. Drivers using marijuana having trouble maintaining a constant speed and keeping the proper distance between cars. They have trouble making accurate estimates of the time it takes to pass. Reaction time is impaired with it taking longer to brake and bring the car to a stop. Part of the slower reaction time may be related to the fact that marijuana distorts one's sense of time. After using marijuana, people experience time as moving slower. Perhaps that is why some stoned drivers think that they drive better: things seem to move slower, so the driver falsely believes that he has more time to react. The truth is that marijuana slows down reaction and the driver is, in reality, less in control of the driving situation. Thus marijuana can impair not only the ability to drive, but it can give the false belief of being capable or in control.

Marijuana impairs perception and psychomotor coordination essential for safe driving. For example, a driver using marijuana has difficulty staying in the proper lane on a curve. We previously established that 90% of the information necessary for driving comes from our sense of sight. Marijuana impairs vision. It takes the eyes longer to recover from headlights or other glare. Marijuana can cause double vision. However, the visual ability most severely affected is visual tracking, i.e. the ability to accurately follow the path of an object.

While a marijuana high lasts two to three hours, marijuana impairs driving skills for approximately six hours. Therefore, someone can feel straight but actually have their driving skills impaired. Poor concentration and delayed reaction time are the two skills that are most affected during this lag time.

We have all heard the adage—"If you drink, don't drive." We should add another safety tip—"If you smoke pot, drive not."

When alcohol is combined with marijuana, the risk of an accident greatly increases, and driving skills are much worse. The combination may be tempting, especially because smoking irritates the mouth and throat and drinking may seem to relieve the discomfort. Both alcohol and marijuana have sedative qualities and disrupt many mental functions. When combined, they cause "double trouble," particularly in concentration, reaction time, visual tracking, and psychomotor skills.

Not only is the degree of impairment worse from combining these two substances, but also the impairment lasts longer than taking just one of the substances. Remember that alcohol is a relatively simple chemical compound which the body eliminates first; then the body begins to work on the more complex chemical, in this case marijuana. The time to eliminate all the chemicals and their effects is extended.

One of the most dangerous aspects of driving under the influence of alcohol and/or marijuana is that the user does not realize his degree of impairment. Both substances give the subjective sense of feeling better and more competent. The user feels he is operating at a higher level of ability and confidence. He may thus take chances or run risks that are counter to his normal good judgement.

DISEASE OF CHEMICAL DEPENDENCY

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1. The disease can be described. A disease is a condition which is describable across a population. If your daughter wakes up one morning with red spots all over her body, and you take her to the doctor, the doctor will take one look at those red spots and (provided they are a certain kind of red spots) will correctly diagnose a case of measles. Not because the doctor knows anything about your child's personality, or habits, or friends, but because measles are measles regardless of who gets them.

   We are now able to diagnose chemical dependency in much the same way. A symptomatology—a list of distinct characteristics of the disease—is available, enabling us to recognize its presence and effects.

   One of the symptoms of alcoholism is the compulsion to drink. This compulsion is evident in drinking that is inappropriate, unpredictable, excessive, and constant.

   The alcoholic's behavior fluctuates between extremes that confuse and bewilder the people around him or her. He or she may be unaware of the compulsion, but it is always there. When confronted with it, he or she might say, "Compulsion? What compulsion? A compulsion means that you have to have a drink. But I'm not like that! I always decide whether or not I'm going to drink, so I can't possibly be an alcoholic."

   To the person close to the alcoholic, that may even sound reasonable. To an objective outside observer, however, it becomes obvious that sooner or later the "decision" is always the same: to drink. Or, in the case of the drug addict, to use.

2. The disease is primary. Rather than being a symptom of an underlying emotional or physical disorder, chemical dependency causes many such problems, or aggravates those that already exist. And these cannot be treated effectively unless the chemical dependency is treated first.

   It is estimated that alcohol is involved in anywhere from 25 to 50 percent of all admissions to hospitals and mental hospitals. Gastritis, cirrhosis of the liver, the deterioration of blood vessels in the brain, the breakdown of the lining of the esophagus, alcoholic myopathy (a generalized weakness in the muscles), impotence in men and menstrual difficulties in women, mental deterioration, and alcohol-related heart disease, among others, continue to escalate for as long as the sick person keeps drinking. Social problems and family problems keep getting worse.

Chemical dependency seems to rest on a human life in such a way that it effectively blocks any other care we might want to deliver to whatever else is wrong with the individual. For example, if an alcoholic has a diseased liver, not even the best practitioner can deliver lasting care to that individual through the alcoholism. That must be lifted off first, to clear the way for healing.

The same is true for emotional problems. Not even the best psychiatric care can have any lasting effects until the drinking or using stops. That must happen before recovery can begin.

3. The disease follows a predictable and progressive course. The doctor who diagnoses your daughter's measles is able to say, "Sorry, but for the next several days some or all of these things are going to happen, because that's the way measles are." The disease runs a predictable course.

   So does chemical dependency. Unlike may other diseases, however, chemical dependency is also progressive. This means that it always gets worse if left untreated.

   There may be plateaus when the drinking or using behavior seems to remain constant for months or even years, and occasionally some event will trigger what appears to be a "spontaneous" improvement. But the disease moves inexoraby toward greater and more serious deterioration over time unless it is arrested. And because it is a multiphasic disease, it affects the individual on all planes—physical, mental, emotional, and spiritual.

4. The disease is permanent, or chronic. Here is where we begin to see how truly serious the disease of chemical dependency is. Nobody has the measles over a lifetime, but once a person becomes chemically dependent, he or she remains so forever.

   Fortunately, it can be arrested, and dependent persons can go on to live happy, healthy, productive lives—as long as they abstain from mood-altering chemcials. Relapse—the return to drinking or using—is an ever-present danger; this is another side to the chronicity of the disease.

   There are countless tales of alcoholic or drug dependent men and women who have remained abstinent for many years and then returned to drinking or using in attempted moderation. Most of the time such men and women soon find themselves drinking or using as heavily and self-destructively as before.

5. The disease is fatal. A person whose chemical dependency is not arrested will eventually die from it, and die prematurely. Left unchecked, chemical dependency is a 100 percent fatal disease.

   Insurance company statistics indicate that an alcoholic who continues to drink has an average life span 12 years shorter than the nonalcoholic in our society. The stated cause of premature death may be physical (heart disease, liver ailments, bleeding ulcers), accidental (car crashes, on-the-job accidents), or emotional (depression-related suicide).

   Death certificates use a lot of euphemisms for chemical dependency, but the result is still the same: the victim is dead, with alcohol or drugs the causative agent.

6. The disease is treatable.

   Primary, predictable, chronic, and fatal: these four characteristics make it seem as if chemcial dependency is the worst disease around. It would be, were it not for one more very important characteristic: it can be treated and arrested.

Now that you know the characteristics of the disease, how can you go about determining whether someone you care about is suffering from it? Needless to say, this is not something that should be taken lightly. Suspecting that someone is chemically dependent, and saying so to the person's face, are two very different matters.

Some people believe that you cannot label another person an alcoholic; that this must come from the person himself or herself. But as we shall see, the chemically dependent person is often the last to recognize (or admit) that he or she has a problem. So it may, in fact, be up to you to observe the signs and draw the conclusions.

The following test, while not a diagnostic tool, can help you to determine if your suspicions are founded. Answer each question with a "yes" or a "no".

1. Is the person drinking (or using any other drug) more now than he or she did in the past?

2. Are you ever afraid to be around the person when he or she is drinking or using drugs—because of the possibility of verbal or physical abuse?

3. Has the person ever forgotten or denied things that happened during a drinking or using episode?

4. Do you worry about the person's drinking or drug use?

5. Does the person refuse to talk about his or her drinking or drug use—or even to discuss the possibility that he or she might have a problem with it?

6. Has the person broken promises to control or stop his or her drinking or drug use?

7. Has the person ever lied about his or her drinking or using, or tried to hide it from you?

8. Have you ever been embarrassed by the person's drinking or drug use?

9. Have you ever lied to anyone else about the person's drinking or drug use?

10. Have you ever made excuses for the way the person behaved while drinking or using?

11. Are most of the person's friends heavy drinkers or drug users?

12. Does the person make excuses for, or try to justify, his or her drinking or using?

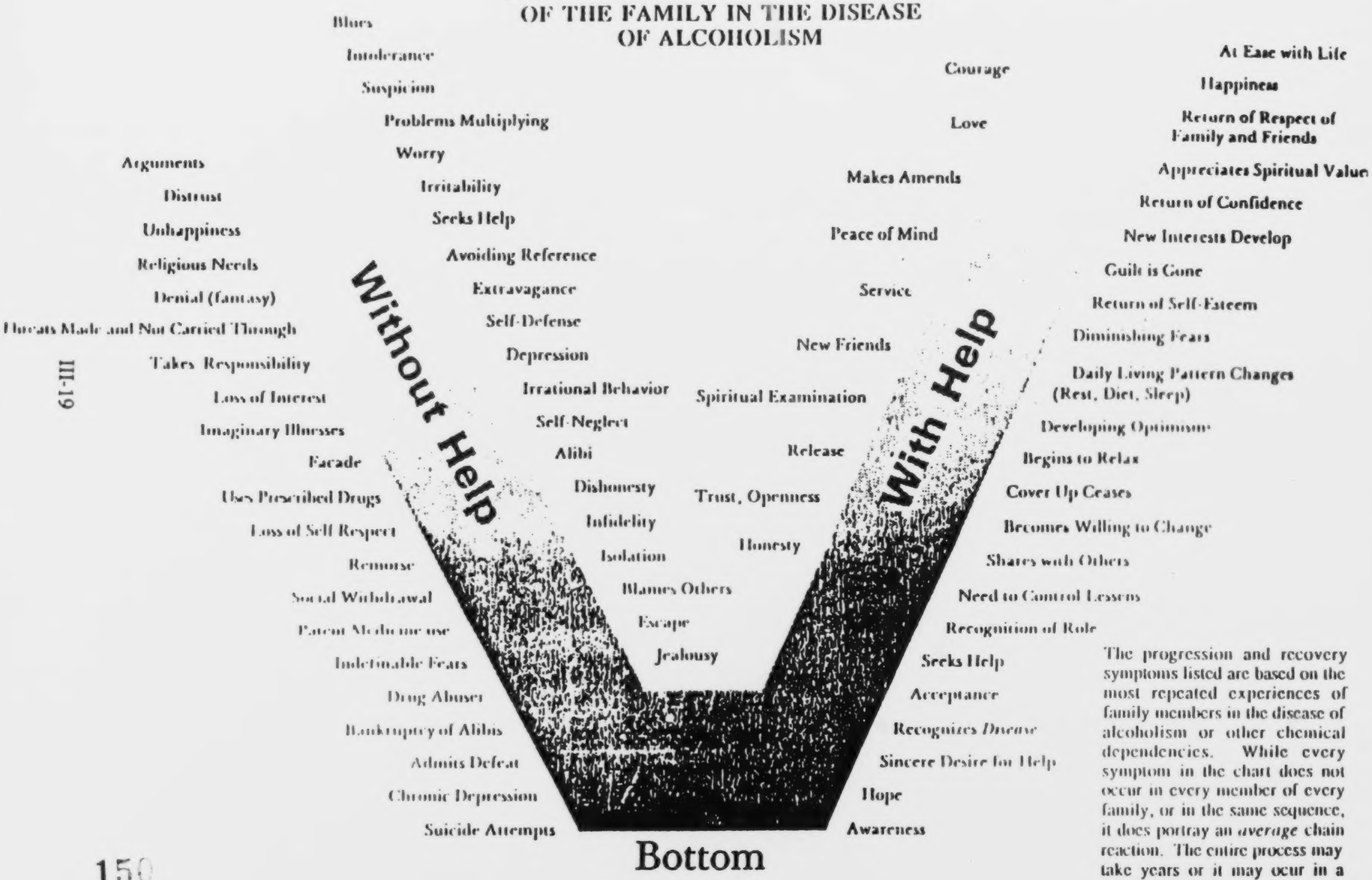
13. Do you feel guilty about the person's drinking or drug use?

14. Are holidays and social functions unpleasant for you because of the person's drinking or drug use?

15. Do you feel anxious or tense around the person because of his or her drinking or drug use?

16. Have you ever helped the person to "cover up" for a drinking or using episode—by calling his or her employer, or telling others that he or she is feeling "sick"?

THE PROGRESSION AND RECOVERY OF THE FAMILY IN THE DISEASE OF ALCOHOLISM


Blues
Intolerance
Suspicion
Problems Multiplying
Worry
Irritability
Seeks Help
Avoiding Reference
Extravagance
Self-Defense
Depression
Irrational Behavior
Self-Neglect
Alibi
Dishonesty
Infidelity
Isolation
Blames Others
Escape
Jealousy
Arguments
Distrust
Unhappiness
Religious Needs
Denial (fantasy)
Threats Made and Not Carried Through
Takes Responsibility
Loss of Interest
Imaginary Illnesses
Facade
Uses Prescribed Drugs
Loss of Self Respect
Remorse
Social Withdrawal
Patent Medicine use
Indefinable Fears
Drug Abuser
Bankruptcy of Alibis
Admits Defeat
Chronic Depression
Suicide Attempts
Without Help
Bottom
With Help
Courage
Love
Makes Amends
Peace of Mind
Service
New Friends
Spiritual Examination
Release
Trust, Openness
Honesty
At Ease with Life
Happiness
Return of Respect of Family and Friends
Appreciates Spiritual Values
Return of Confidence
New Interests Develop
Guilt is Gone
Return of Self-Esteem
Diminishing Fears
Daily Living Pattern Changes (Rest, Diet, Sleep)
Developing Optimism
Begins to Relax
Cover Up Ceases
Becomes Willing to Change
Shares with Others
Need to Control Lessens
Recognition of Role
Seeks Help
Acceptance
Recognizes *Disease*
Sincere Desire for Help
Hope
Awareness

The progression and recovery symptoms listed are based on the most repeated experiences of family members in the disease of alcoholism or other chemical dependencies. While every symptom in the chart does not occur in every member of every family, or in the same sequence, it does portray an *average* chain reaction. The entire process may take years or it may ocur in a very short time.

C.A.S.T.

(Name)

(Date)

Please check ( ) the answer below that best describes your feelings, behavior, and experiences related to a parent's alcohol use. Take your time and be as accurate as possible. Answer all 30 questions by checking either "Yes" or No."

(Yes)	(No)	
		1. Have you ever thought that one of your parents had a drinking problem?
		2. Have you ever lost sleep because of a parent's drinking?
		3. Did you ever encourage one of your parents to quit drinking?
		4. Did you ever feel alone, scared, nervous, angry, or frustrated because a parent was not able to stop drinking?
		5. Did you ever argue or fight with a parent when he or she was drinking?
		6. Did you ever threaten to run away from home because of a parent's drinking?
		7. Has a parent ever yelled at or hit you or other family members when drinking?
		8. Have you ever heard your parents fight when one of them was drunk?
		9. Did you ever protect another family member from a parent who was drinking?
		10. Did you ever feel like hiding or emptying a parent's bottle of liquor?
		11. Do many of your thoughts revolve around a problem drinking parent or difficulties that arise because of his or her drinking?
		12. Did you ever wish that a parent would stop drinking?
		13. Did you ever feel responsible for and guilty about a parent's drinking?
		14. Did you ever fear that your parents would get divorced due to alcohol misuse?
		15. Have you ever withdrawn from and avoided outside activities and friends because of embarrassment and shame over a parent's drinking problem?
		16. Did you ever feel caught in the middle of an argument or fight between a problem drinking parent and your other parent?
		17. Did you ever feel that you made a parent drink alcohol?
		18. Have you ever felt that a problem drinking parent did not really love you?
		19. Did you ever resent a parent's drinking?
		20. Have you ever worried about a parent's health because of his or her alcohol use?
		21. Have you ever been blamed for a parent's drinking?
		22. Did you ever think your father was an alcoholic?
		23. Did you ever wish your home could be more like the homes of your friends who did not have a parent with a drinking problem?
		24. Did a parent ever make promises to you that he or she did not keep because of drinking?
		25. Did you ever think your mother was an alcoholic?
		26. Did you ever wish that you could talk to someone who could understand and help the alcohol-related problems in your family?
		27. Did you ever fight with your brothers and sisters about a parent's drinking?
		28. Did you ever stay away from home to avoid the drinking parent or your other parent's reaction to the drinking?
		29. Have you ever felt sick, cried, or had a "knot" in your stomach after worrying about a parent's drinking?
		30. Did you ever take over any chores and duties at home that were usually done by a parent before he or she developed a drinking problem?

Children of Alcoholics Screening Test (C.A.S.T.)
Scoring Guidelines

A YES answer to 0 - 1 question indicates children of non-alcoholics.

A YES answer to 2 - 5 questions indicates children of problem drinkers.

A YES answer to 6 or more questions indicates children of alcoholics.

ROLES, TRAITS AND PROBABLE OUTCOMES FOR CHILDREN OF ALCOHOLICS

	VISIBLE QUALITIES	INNER FEELINGS	REPRESENTS TO FAMILY	TRAITS	POSSIBLE FUTURE CHARACTERISTICS	
					WITHOUT HELP	WITH HELP
FAMILY HERO	Visible success Does what is right	Inadequate	Self-Worth (Family can be proud)	High Achiever Grades Friends Sports	Workaholic Never wrong Responsible for everything Marry dependent	Accept failure Responsible for self, not all Good executive
SCAPEGOAT	Hostility Defiance Anger	Hurt Guilt	Takes focus off the alcoholic	Negative attention Won't compete with "family hero"	Unplanned pregnancy Trouble maker in school and later in office Prison	Accept responsibility Good counselor Ability to see reality
LOST CHILD	Withdrawn Loner	Loneliness Unimportant	Relief (One child not to worry about)	"Invisible" — Quiet No friends Follower Trouble making decisions	Little zest for life Sexual identity problems Promiscuous or stay alone Often dies at early age	Independent Talented Creative Imaginative
MASCOT	Fragile Immature Needs protection	Fear	Fun and humor (Comic relief)	Hyperactive Learning disabilities Short attention span	Ulcers, can't handle stress Compulsive clown Marry "hero" for care	Take care of self No longer clown Fun to be with Good sense of humor

DIAGNOSTIC AND STATISTICAL MANUAL III - REVISED
ALCOHOL DEPENDENCE

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Most adults in the United States are light drinkers. About 35% abstain, 55% drink fewer than three alcoholic drinks a week, and only 11% consume an average of one ounce or more of alcohol a day.

Drinking patterns vary by age and sex. For both males and females, the prevalence of drinking is highest and abstention is lowest in the 21-34 year age range. At all ages, two to five times more males than females are "heavy" drinkers, although, because of differences in weight and body water, different standards should be used to define "heavy" drinking in females. For ages 65 years and older, abstainers exceed drinkers in both sexes, and only 7% of males and 2% of females are considered heavy drinkers.

Most alcohol is consumed by a small percentage of people: 10% of drinkers consume 50% of the total amount of alcohol consumed.

Patterns of Use

There are three main patterns of chronic Alcohol Abuse or Dependence. The first consists of regular daily intake of large amounts; the second, of regular heavy drinking limited to weekends; the third, of long periods of sobriety interspersed with binges of daily heavy drinking lasting for weeks or months. It is a mistake to associate one of these particular patterns exclusively with "alcoholism".

Some investigators divide alcoholism into "species" depending on the pattern of drinking. One species, so-called gamma alcoholism, is common in the United States and conforms to the sterotype of the alcoholism seen in people who are active in Alcoholics Anonymous. Gamma alcoholism involves problems with "control": once the person with gamma alcoholism begins to drink, he or she is unable to stop until poor health or depleted financial resources prevent further drinking. Once the "bender" is terminated, however, the person is able to abstain from alcohol for varying lengths of time.

Gamma alcoholism is often compared with a "species" of alcoholism common in France. In this, the person with alcoholism is not aware of lack of control: he or she must drink a given quantity of alcohol every day, but there is no compulsion to exceed that amount. The person may not recognize that he or she has an alcohol problem until, by some reason, he or she has to stop drinking and develops withdrawal symptoms.

Although these two pure types of alcoholism do exist, they do not conform to the pattern of drinking seen in most people with Alcohol Abuse or Dependence in the United States.

Associated Features

Alcohol Dependence and Abuse are often associated with use and abuse of other psychoactive drugs, including cannabis, cocaine, heroin, amphetamines, and various sedatives and hypnotics. Frequent and often simultaneous use of alcohol plus several of the above substances is most commonly seen in adolescents and people under 30. Use and abuse of benzodiazepines combined with alcohol are more common in middle life. Although benzodiazepines are contraindicted in the treatment of alcoholism, these agents are often prescribed by a physician in a misguided attempt to stop or reduce a patient's drinking.

Whether most people with Alcohol Dependence are at particular risk to develop dependence or abuse of other drugs is not definitely known, but certainly some are. Nicotine Dependence is especially common.

Alcohol Dependence is often associated with depression, but usually the depression appears to be a consequence, not a cause, of the drinking. In Bipolar Disorder, alcohol intake increases more often during Manic Episodes than during depressions. Anxiety Disorders—particularly Agoraphobia in females and Social Phobia in males—occur in a sizable minority of people with Alcohol Abuse or Dependence, their onset often preceeding the heavy drinking.

Course

The natural history of alcoholism seems to be somewhat different in males and females. In males the onset is usually in the late teens or the 20s, the course is insidious, and the person may not be fully aware of his dependence on alcohol until the 30s. The first hospitalization usually occurs in the late 30s or 40s. In males, symptoms of Alcohol Dependence or Abuse rarely occur for the first time after age 45. If they do occur, a Mood Disorder or Organic Mental Disorder should be considered as a source of symptoms.

Alcohol Dependence has a higher "spontaneous" remission rate than is often recognized. The frequency of admissions to psychiatric hospitals for alcoholism drops markedly in the sixth and seventh decades of life, as do first arrests for alcohol-related offenses. Although the mortality rate among people with Alcohol Dependence is perhaps two to three times that of the general population, this is probably insufficient to account for the apparent decrease in problem drinking in middle and late middle life.

Females with Alcohol Dependence have been studied less extensiveley than males but the evidence suggests that the course of the disorder is more variable in females. The onset often occurs later, and spontaneous remission apparently is less frequent. Females with alcoholism are also more likley to have a history of a Mood Disorder.

Drinking problems may occur in various sequences. Frequently, after years of heavy problem-free drinking, a person may experience many problems in a brief period.

As people drink more over days, months, and years, they gradually need to drink more to obtain the same effect. This is called tolerance. A person with severe chronic Alcohol Dependence may be able to drink, at most, twice as much as a teetotaler of similar age and health. Compared with tolerance for morphine, which can be considerable, tolerance for alcohol is modest.

More striking than "acquired" tolerance may be inborn tolerance. People vary widely in the amount of alcohol they can tolerate, independently of their drinking experience. Some people, however hard they try, cannot drink more than a small amount of alcohol without developing a headache, upset stomach, or dizziness. Others seem able to drink large amounts with hardly any bad effects; they appear to have been born with this capacity, not to have developed it entirely from practice.

Differences in tolerance for alcohol apply not only to people but to racial groups. For example, many Orientals develop flushing of the skin, sometimes with nausea, after drinking only a small amount of alcohol.

Prevalence

A community study in the United States, conducted from 1981 to 1983 and using DSM III criteria, indicated that approximately 13% of the adult population had had Alcohol Abuse or Dependence at some time in their lives.

Familial Pattern

Alcohol Dependence tends to cluster in families. Recent evidence, based on adoption studies, indicates that the transmission of Alcohol Dependence from generation to generation does not require environmental exposure to family members with alcohol problems: it occurs at increased rates even when the children are reared by adoptive parents without alcohol problems, which suggests a genetic influence in the disorder.

DIAGNOSTIC AND STATISTICAL MANUAL III - REVISED SUBSTANCE DEPENDENCE AND ABUSE

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Psychoactive Substance Dependence

The essential feature of this disorder is a cluster of cognitive, behavioral, and physiologic symptoms that indicate that the person has impaired control of psychoactive substance use and continues use of the substance despite adverse consequences. The symptoms of the dependence syndrome include, but are not limited to, the physiologic symptoms of tolerance and withdrawal.

The symptoms of the dependence syndrome are the same across all categories of psychoactive substance, but for some classes some of the symptoms are less salient, and in a few instances do not apply (e.g., withdrawal symptoms do not occur in Hallucinogen Dependence). At least three of the nine characteristic symptoms of dependence are necessary to make the diagnosis. In addition, the diagnosis of the dependence syndrome requires that some symptoms of the disturbance have persisted for at least one month, or have occurred repeatedly over a longer period of time, as in binge drinking.

Dependence as defined here is conceptualized as having different degrees of severity, and guidelines for mild, moderate, and severe dependence and dependence in partial or full remission are provided.

Symptoms of Dependence

The following are the characteristic symptoms of dependence. It should be noted that not all nine symptoms must be present for the diagnosis of Dependence, and for some classes of psychoactive substances, certain of these symptoms do not apply.

1. The person finds that when he or she actually takes the psychoactive substance, it is often in larger amounts or over a longer period than originally intended. For example, the person may decide to take only one drink of alcohol, but after taking this first drink, continues to drink until severely intoxicated.

2. The person recognizes that the substance use is excessive, and has attempted to reduce or control it, but has been unable to do so (as long as the substance is available). In other

instances the person may want to reduce or control his or her substance use, but has never actually made an effort to do so.

3. A great deal of time is spent in activities necessary to procure the substance (including theft), taking it, or recovering from its effects. In mild cases the person may spend several hours a day taking the substance, but continue to be involved in other activities. In severe cases, virtually all of the user's daily activities revolve around obtaining, using, and recuperating from the effects of the substance.

4. The person may suffer intoxication or withdrawal symptoms when he or she is expected to fulfill major role obligations (work, school, homemaking). For example, the person may be intoxicated when working outside the home or when expected to take care of his or her children. In addition, the person may be intoxicated or have withdrawal symptoms in situations in which substance use is physically hazardous, such as driving a car or operating machinery.

5. Important social, occupational, or recreational activities are given up or reduced because of substance use. The person may withdraw from family activities and hobbies in order to spend more time with substance-using friends, or use the substance in private.

6. With heavy and prolonged substance use, a variety of social, psychological, and physical problems occur, and are exacerbated by continued use of the substance. Despite having one or more of these problems (and recognizing that use of the substance causes or exacerbates them), the person continues to use the substance.

7. Significant tolerance, a markedly diminshed effect with continued use of the same amount of the substance, occurs. The person will then take greatly increased amounts of the substance in order to achieve intoxication or the desired effect. This is distinguished from the marked personal differences in initial sensitivity to the effects of a particular substance.

   The degree to which tolerance develops varies greatly across classes of substances. Many heavy users of cannabis are not aware of tolerance to it, although tolerance has been demonstrated in some people. Whether there is tolerance to phencyclidine (PCP) and related substances is unclear. Heavy users of alcohol at the peak of their tolerance can consume only about 50% more than they originally needed in order to experience the effects of intoxication. In contrast, heavy users of opioids often increase the amount of opioids consumed to tenfold the amount they originally used—an amount that would be lethal to a nonuser. When the psychoactive substance used is illegal and perhaps mixed with various diluents or with other substances, tolerance may be difficult to determine.

8. With continued use, characteristic withdrawal symptoms develop when the person stops or reduces intake of the substance. The withdrawal symptoms vary greatly across classes of substances. Marked and generally easily measured physiologic signs of withdrawal are common with alcohol, opioids, sedatives, hypnotics, and naxiolytics. Such signs are less obvious with amphetamines, cocaine, nicotine, and cannabis, but intense subjective symptoms can occur upon withdrawal from heavy use of these substances. No significant withdrawal is seen even after repeated use of hallucinogens; withdrawal from PCP and related substance has not yet been described in humans, although it has been demonstrated in animals.

9. After developing unpleasant withdrawal symptoms, the person begins taking the substance in order to relieve or avoid those symptoms. This typically involves using the substance throughout the day, beginning soon after awaking. This symptom is generally not present with cannabis, hallucinogens, and PCP.

Diagnostic Criteria for Psychoactive Substance Dependence

At least three of the following:

1. Substance often taken in larger amounts or over a longer period than the person intended.

2. Persistent desire or one or more unsuccessful efforts to cut down or control substance use.

3. A great deal of time spent in activities necessary to get the substance (e.g., theft), taking the substance, or recovering from its effects.

4. Frequent intoxication or withdrawal symptoms when expected to fulfill major role obligations at work, school, or home (e.g., does not go to work because hung over, goes to school or work "high," intoxicated while taking care of his or her children), or when substance use is physically hazardous (e.g., drives when intoxicated).

5. Important social, occupational, or recreational activities given up or reduced because of substance use.

6. Continued substance use despite knowledge of having a persistent or recurrent social, psychological, or physical problem that is caused or exacerbated by the use of the

substance (e.g., keeps using heroin despite family arguments about it, cocaine-induced depression, or having an ulcer made worse by drinking).

7. Marked tolerance: need for markedly increased amounts of the substance (i.e., at least a 50% increase) in order to achieve intoxication or desired effect, or markedly diminished effect with continued use of the same amount.

Note: The following items may not apply to cannabis, hallucinogens, or phencyclidine (PCP).

8. Characteristic withdrawal symptoms.
9. Substance often taken to relieve or avoid withdrawal symptoms.

Some symptoms of the disturbance have persisted for at least one month, or have occurred repeatedly over a longer period of time.

Criteria for Severity of Psychoactive Substance Dependence

Mild: Few, if any smptoms in excess of those required to make the diagnosis, and the symptoms result in no more than mild impairment in occupational functioning or in usual social activities or relationships with others.

Moderate: Symptoms or functional impairment between "mild" and "severe".

Severe: Many symptoms in excess of those required to make the diagnosis, and the symptoms markedly interfere with occupational functioning or with usual social activities or relationships with others.

In Partial Remision: During the past six months, some use of the substance and some symptoms of dependence.

In Full Remission: During the past six months, either no use of substance, or use of the substance and no symptoms of dependence.

Psychoactive Substance Abuse

Psychoactive Substance Abuse is a residual category for noting maladaptive patterns of psychoactive substance use that have never met the criteria for dependence for that particular class of substance. The maladaptive pattern of use is indicated by either (1) continued use of the psychoactive substance despite knowledge of having a persistent or recurrent social, occupation, psychological, or physical problem that is caused or exacerbated by use of the substance or (2) recurrent use of the substance in situations when use is physically hazardous (e.g., driving while intoxicated). The diagnosis is made only if some symptoms of the disturbance have persisted for at least one month or have occurred repeatedly over a longer period of time.

This diagnosis is most likely to be applicable to people who have only recently started taking psychoactive substances and to involve substances, such as cannabis, cocaine, and hallucinogens, that are less likely to be associated with marked physiologic signs of withdrawal and the need to take the substance to relieve or avoid withdrawal symptoms.

Examples of situations in which this category would be appropriate are as follows:

1. A college student binges on cocaine every few weekends. These periods are followed by a day or two of missing school because of "crashing". There are no other symptoms.
2. A middle-aged man repeatedly drives his car when intoxicated with alcohol. There are no other symptoms.
3. A woman keeps drinking alcohol even though her physician has told her that it is responsible for exacerbating the symptoms of a duodenal ulcer. There are no other symptoms.

Diagnostic Criteria for Psychoactive Substance Abuse

1. A maladaptive pattern or psychoactive substance use is indicated by at least one of the following:
    - Continued use despite knowledge of having a persistent or recurrent social, occupational psychological, or physical problem that is caused or exacerbated by use of the psychoactive substance.
    - Recurrent use in situations in which use is physically hazardous (e.g., driving while intoxicated).
2. Some symptoms of the disturbance have persisted for at least one month, or have occurred repeatedly over a longer period of time.
3. Never met the criteria for Psychoactive Substance Dependence for this substance.

Classes of Psychoactive Substances

Nine classes of psychoactive substance are associated with both abuse and dependence: alcohol; amphetamine or similarly acting sympathomimetics; cannabis; cocaine; hallucinogens; inhalants; opioids; phencyclidine (PCP) or similarly acting arylcyclohexylmines; and sedatives, hypnotics or anxiolytics.

FILM REVIEWS

"Deadliest Weapon in America" - 30 minutes

Useful as a tool to get discussion started. Graphic presentation of the consequences of drinking and driving. "On the spot" scenes of accidents, interviews with survivors of family members killed by drinking drivers. Available from MTI for $600.

"Death in the Fast Lane" - 15 minutes

Use to demonstrate young people are at greater risk because of inexperience of driving and drinking. Commentary on the deaths of young people caused by alcohol use. Available from MTI for $275.

"Disease Concept of Alcoholism II" - 40 minutes

Use during discussion about alcoholism. It is a discussion of alcoholism as a disease. Available from Gary Whiteaker Company for $600.

"Drink, Drive, Rationalize" - 26 minutes

Short vignettes of common misconceptions about drinking. Available from AAA Foundation for Traffic Safety for $100.

"Driving Under the Influence" - 22 minutes

Use to initiate or support discussion on statistics. Family members of victims, victims, and drunk drivers discuss the impact DWI has had on their lives in this film. Available from Alfred Higgins Productions for $485.

"The DWI Decision" - 19 minutes

This is a three part film. Useful as a tool to present information. Part 1 - How alcohol affects the body. Part 2- - Psychological effects of alcohol. Part 3 - Encourages viewer to make "good" decisions about the use of alcohol. Available from VISUCOM for $475.

"Friday Night Five" - 27 minutes

Good as a tool to illustrate differences in drinking drivers. Five different drinking and driving episodes with different outcomes. Available from G. T. Rogers for $510 (film) or $460 (video).

"Hazzards of Drugged Driving" - 30 minutes

Produced for Mazda Motors and distributed by Melear Multi-Media as a two part video which can be purchased for $195. Explains how the body and brain are impaired by substance use, making driving unsafe. Offers a series of tips to help teens protect themselves and their friends from the tragedy of a drinking/drugging automobile accident.

"If you Could See What I've Seen" - 21 minutes

Use to provoke discussion of personal responsibility for accidents. State Trooper Pete Collins describes DWI accidents he has investigated. Available from VISUCOM for $575.

"Kevin's Story" - 19 minutes

Use to illustrate that accidents can happen to anyone. Eighteen year old Kevin is convicted of drunk driving and manslaughter in the death of his girlfriend. Part of his sentence is to talk about his experience. Available from New Day Films for $350. May be rented from St. Louis NCA and Speas Resource Center.

"Life, Death, and Recovery of an Alcoholic" - 28 minutes

Can be used as basis for discussion on alcoholism as a disease. Progression if untreated, recovery if treated. Dr. Joseph Pursch describes the life of a promising young man who becomes alcoholic. The consequences to him, his family, and his employer. Available from FMS Productions for $395. May be rented from St. Louis NCA and Speas Resource Center.

"Medical Aspects of Alcohol, Part 1 - 30 minutes

Especially helpful during disucssion of the harmful effects of alcohol on the system. Dr. Schneider uses flannel board to illustrate the various parts of the body that are impacted by the use of alcohol. Available from FMS Productions for $400. May be rented from St. Louis NCA and Speas Resource Center.

"So Long Pal" - 23 minutes

Useful to break audience resistance to mandatory programs. Humor, fantasy, and animation provide information in humorous/non-threatening fashion. Available from FMS Productions for $295. May be rented from Speas Resource Center.

"Too High a Price" - 25 minutes

Use to dramatize the effects of drinking and driving victims. True life interviews with family members of six victims of DWI accidents. Four victims were killed, two were badly injured. Available from South Carolina Commission on Alcohol and Drug Abuse as a free loan.

"Under the Influence" - 26 minutes

Useful as a tool to demonstrate alcohol induced impairment. Approximately 30 volunteers are followed through sober driving and driving with a .10% BAC. Available from FMS Productions for $375. May be rented from Speas Resource Center.

"Understanding Alcohol Use and Abuse" - 12 minutes

Useful as a very general introduction to alcohol use. Animated film in which the characters discuss in general terms alcohol, alcohol abuse, physical consequences of alcohol use, and the reason why people drink. Available from Walt Disney (Coronet/MTI) for $320 (film) or $240 (videocassette).

"Until I Get Caught" - 28 minutes

Useful as a trigger to discussion about students' feelings concerning their responsibility to themselves and society to not drink and drive. Dick Cavett narrates this presentation of information on the basic subjects of drinking and driving. Included are discussions by family members of those killed by drinking drivers and comments by those who say they will continue to drink and drive. Available from FMS Productions for $485. May be rented from St. Louis NCA and Speas Resource Center.

"What Everyone Should Know About Drinking and Driving" - 16 minutes

Basic information, useful at beginning of course. Question/answer format. Available from Channing L. Bete Comany, Inc. for $300.

"Why Me" - 20 minutes

Use to show impact of alcohol alone and alcohol in combination with other drugs or driving skills. The driving skills of four different people are tested sober, intoxicated with alcohol only, and intoxicated with alcohol and different drugs. Available from South Carolina Commission on Alcohol and Drug Abuse for $200.

"You the Driver" - 30 minutes (slides and videocassette)

Can be useful as adjunct to instruction because of slide format. Discusses the effects of various amounts of alcohol on driving ability and ways to avoid intoxication. Available from AAA Driver Education Proram for $31.50.

"Young People in AA" - 28 minutes

Especially useful in breaking down adolescent denial. Several young people who have participated in AA discuss their past drinking problems and their recovery process. Available from AA General Service Office for $150 (film) or $15 (videocassette) or for $35 weekly rental.

"Your DWI Decision" - 6 film strips, 10-14 minutes each

Film strips: (1) fact vs. myth of alcohol use; (2) BAC; (3) how alcohol deteriaorates brain functions; (4) discusses mood-personality changes; (5) discussion of actions necessary to drive a car: and (6) a pre/post questionnaire. Available from Doron Precision Systems for $570.

"You're Under Arrest" - 15 minutes

Use to present information on impaired reflexes and judgements caused by drinking. Impairment caused by alcohol demonstrated, procedures of arrest and need for treatment/rehabilitation for chronic offender. May be purchased from Coronet/MTI for $265 or rented for $50.

FILM/VIDEO RESOURCES

AA General Service Office
Box 459
Grand Central Station
New York, NY 10163
(212) 686-1100

AAA Foundation for Traffic Safety
8111 Gatehouse Road
Falls Church, VA 22042
(703) 222-2062

AIMS Media
6901 Woodley Avenue
Van Nuys, CA 91406-4878
(800) 367-2467

Alfred Higgins Productions, Inc.
9100 Sunset Blvd.
Los Angeles, CA 90069
(213) 272-6500

All About Media, Inc.
4306 Crenshaw Blvd.,
Suite 105
Los Angeles, CA 90008
(213) 777-1000

Barr Films
12801 Schabarum
P.O. Box 7878
Irvindale, CA 91706
(800) 234-7878

Cambridge Documentary Films, Inc.
P.O. Box 385
Cambridge, MA 02139
(617) 354-3677

Carousel Film and Video
241 E. 34th Street
New York, NY 10016
(212) 683-1600

Channing L. Bete Co., Inc.
200 State Road
South Deerfield, MA 01373
(800) 421-4609

Churchill Films
662 N. Robertson Blvd.
Los Angeles, CA 90069
(213) 657-5110

Cinemed Inc.
P.O. Box 96
Ashland, OR 97520
(503) 488-2805

Coronet-MTI Film and Video
108 Wilmot Road
Deerfield, IL 60015
(800) 621-2131

Doron Precision Systems, Inc.
P.O. Box 400
Binghampton, NY 13902
(607) 772-1610

FMS Productions, Inc.
P.O. Box 4428
Santa Barbara, CA 93140
(800) 421-4609

Gary Whiteaker Corporation
P.O. Box 307
Belleville, IL 62222
(618) 476-7771

Gerald T. Rogers Productions, Inc.
5225 Old Orchard Road, Suite 23
Skokie, IL 60077
(800) 227-9100

Insurance Information Institute
110 William Street
New York, NY 10038
(212) 669-9200

Johnson Institute
510 First Avenue North
Minneapolis, MN 55403-1607
(612) 341-0435

Kemper Group
Kemper Television Center
F-6 Long Grove, IL 60049
(312) 540-2819

Melear Multi-Media
1344 Johnson Ferry Road
Suite 14
Marietta, GA 30068
(404) 971-5665

MTI Teleprograms, Inc.
3710 Commercial Avenue
Northbrook, IL 60062
(800) 323-5343

National Council on Alcoholism
and Drug Abuse - St. Louis Area
8790 Manchester Road
St. Louis, MO 63144
(314) 962-3456
(Film/Video Rental)

New Day Films
22 Riverview Drive
Wayne, NJ 07470-3191
(201) 633-0212

Onsite Training and Consultants, Inc.
2820 West Main
Rapid City, SD 57702
(605) 341-7432

S/P Associates
1113 South Pearl Street
Denver, CO 80201
(303) 733-1980

South Carolina Commission on Alcohol
and Drug Abuse
3700 Forest Drive
Columbia, SC 29204

Southerby
P.O. Box 154013
Laguna Beach, CA 90815
(800) 243-3456

Speas Resource Center
616 East 63rd Street
Kansas City, MO 64110
(816) 444-0642
(Film/Video Rental)

Sunburst Communications
101 Castleton Street
Pleasantville, NY 10570
(800) 431-1934

VISUCOM
P.O. Box 5472
Redwood City, CA 94063
(800) 222-4002